

**HEALTH FINANCING AND SUSTAINABILITY
TECHNICAL THEME PAPERS
YEAR TWO**

Submitted to:

**Health Services Division
Office of Health
Bureau of Research and Development
Agency for International Development**

JANUARY 1992

**Health Financing and Sustainability (HFS) Project
Abt Associates Inc., Prime Contractor
4800 Montgomery Lane, Suite 600
Bethesda, Maryland, 20814 USA
Tel: (301) 913-0500 Fax: (301) 652-7791
Telex: 312636**

**Management Sciences for Health, Subcontractor
The Urban Institute, Subcontractor
Clark Atlanta University, Subcontractor
Tillinghast, a Towers Perrin Company, Subcontractor**

A.I.D. Contract No. DPE-5974-Z-00-9026-00

TABLE OF CONTENTS

FOREWORD	i
COST RECOVERY	1
HEALTH SERVICE COSTING	13
PUBLIC-PRIVATE COLLABORATION	21
RESOURCE ALLOCATION, USE, AND MANAGEMENT	32
SOCIAL FINANCING OF THE DEMAND FOR HEALTH SERVICES	49

YEAR TWO THEME PAPERS

FOREWORD

At the end of each year of its life, the Health Financing and Sustainability (HFS) Project (see Box 1) produces theme papers to assess the issues that have arisen in the course of its work and how they are being addressed. HFS organizes the issues according to the five technical areas (see Box 2) specified by A.I.D. in the project's scope of work. This is the second set of HFS theme papers.

This second set of papers aims to inform USAID Mission and Bureau personnel, and other practitioners in the field of health financing, about HFS activities and findings in its technical areas. In particular, these theme papers explain the range of issues encountered by HFS, the analyses we have performed to address the issues, the advice we have provided as a result of the analyses, and where we think we will go in the future. We include both the analyses performed as a part of our technical assistance activities, and those begun under our applied research program.

Box 1: The HFS Project

Health Financing and Sustainability (HFS) is a five-year project, begun in 1989, of the Health Services Division, Office of Health, Bureau of Research and Development, of the United States Agency for International Development. HFS provides technical assistance, conducts applied research, and disseminates information about health financing and organization in developing countries. The project's purpose is to influence policy change, assist in policy implementation, and demonstrate and evaluate the effects of alternative policies and mechanisms for financing health services.

The five year two theme papers and their authors are:

- Cost Recovery - Charles Griffin
- Health Service Costing - James Setzer
- Public-Private Collaboration - Harry Cross
- Resource Allocation, Use, and Management - Ricardo Bitran and Stephen Heinig
- Social Financing of the Demand for Health Services - Gerard La Forgia

The entire staff of the project contributed to the papers through provision of information about specific activities to the authors, comments at seminars on the papers, and reviews of drafts.

Further information about any of the specific activities mentioned in the papers may be obtained by writing to HFS's Information Center. HFS Technical Reports and Notes cover many of the activities, trip reports cover others. In addition, the HFS Applied Research Agenda, years one and two Annual Reports, and year one theme papers provide other summaries.

Box 2: HFS Technical Areas

- Cost Recovery
- Health Care Costing
- Public-Private Collaboration
- Resource Allocation, Use, and Management
- Social Financing of Demand

The year two theme papers represent a natural continuation of what we presented in year one. The year one papers defined the technical areas and described the issues in each that had arisen in the requests we had received. By the end of year one, HFS had many activities planned or just under way, but few complete. Thus, we were unable in the year one papers to report on the

results of analyses of the policy advice provided. Now we are able to report on many analyses performed and policy and implementation advice provided. Over the course of our second year, some new issues have emerged. These theme papers, therefore, update the issues identified in the year one papers.

In the foreword to the year one papers, we briefly described some of the interactions and complementary elements among the approaches represented by the technical areas (see Box 3). These continue to be in evidence in year two. The reader who looks at any combination of the year two papers will note that many country activities (e.g., Belize, Egypt, and Haiti) involved initiatives in more than one of the technical areas. The combination of initiatives chosen by a given country seems to depend on a combination of initial conditions (e.g., presence or absence of a large private sector, presence or absence of "insurable" groups) and some vision of what the ultimate objectives are for the reform of health financing.

The latter seems to be the least clear in the countries HFS is assisting. All appear at least to be considering, if not beginning to move toward, some type of market-oriented system. In such a system, the government's ideal role changes. The government is no longer the primary provider and source of financing for health services. It becomes the source of financing for a more limited set of services, supports the poorest part of the population, and acts as a regulator and promotor of a greater private role in provision of services, arrangement of risk sharing arrangements, and financing. Thus, many countries are headed toward a system that is defined only in general terms. Further, advantages and disadvantages of the possible ways to make the transition to a more market-oriented system are not yet clear. Thus, many different paths are being followed.

HFS seeks to help governments take steps in the transition that are well thought out, accompanied by needed complementary actions, and consistent with one another. As the steps are taken through policy change and implementation, HFS will help analyze how well they accomplish their intended purpose, what unintended consequences they produce, and what next steps may be appropriate. This will allow the policies to be modified to better attain their objectives. It also will clarify the risks and benefits of pursuing various paths and permit the ultimate objectives to come into clearer focus.

The results of HFS's year two activities reported in these theme papers should be instructive in this regard. They represent:

- Diagnoses of health financing problems, which point the way to needed

Box 3:
Complementarity of Technical Approaches

The scope of work assigned to HFS by A.I.D. specifies the five technical areas that are covered by the annual theme papers. Four of them represent approaches to health financing policy that often are complementary and interlocking. The fifth technical area, costing, is a technique used frequently by HFS in performing analyses in support of each approach.

The following few sentences provide an idea of how the approaches represented by the technical areas complement each other. Public-private collaboration usually means that the public sector will allow, regulate, and often foster development of the private sector to improve allocation, use, and management of resources. Cost recovery in the public sector is undertaken to generate more resources for the health system. To complement the institution of cost recovery, improvements in quality are usually sought, often through increased efficiency in the use of resources. When cost recovery and increased private participation become important features of a health financing system, the need grows for social financing mechanisms to spread financial risks among individuals and households. The combination of approaches that HFS might recommend in a given case depends on the particular legal, cultural, political, economic, and institutional circumstances of the situation.

policy changes (e.g., Belize, C.A.R.).

- Prospective analyses of proposed policy changes, which define expected consequences of various measures (e.g., Haiti, Kenya, the Dominican Republic).
- Evaluations of steps already taken, so that corrections may be made and lessons learned (e.g. the Philippines and Zaire).

Those governments considering the array of steps available to them in pursuit of sustainable health financing can learn from the experiences of others. At the very least they can learn what kinds of analyses could and should be performed. These theme papers try to present such experiences.

COST RECOVERY

by

Charles C. Griffin

INTRODUCTION

Governments are important providers of health care in most developing countries, whether the measure is its share of expenditures, facilities, or personnel. Government services can be financed through tax revenues, budget deficits, foreign assistance, private donations, third-party (including social security) insurance payments, user fees, or borrowing. In most developing countries, the two primary sources of revenue for public health services are tax revenues and foreign assistance, as public services are provided free of charge or for minimal fees. Cost recovery, achieved through the charging of fees to users¹, has played a minor (though increasing) role in generating resources for the public sector.

The HFS Project produced a theme paper on cost recovery² at the end of the project's first year that reviewed the major issues in cost recovery and outlined directions for HFS assistance on the topic. That paper concluded that the central issue in cost recovery is that success is contingent upon existing political, economic, and managerial conditions. It further argued that considerable study is needed to assess how well various approaches to cost recovery in the public sector manage the following constraints: (1) the political and economic circumstances under which implementation occurs, (2) the effect of cost recovery on equity and quality, (3) the efficiency of operational performance, and (4) the generation and maintenance of political and popular support. In general, the theme paper argued that it is best to proceed at a careful pace in instituting cost recovery programs: "The political and economic feasibility of various options should be weighed before implementation. Experiments can be devised to compare the acceptability and effectiveness of alternative exemption systems, price-setting formulas, revenue collection methods, and MOH-facility revenue sharing schemes. Finally, more consideration must be given to the organization and management of health services to facilitate the efficient collection and allocation of resources."

This paper builds on last year's theme paper by focusing on advice given by HFS to USAID missions and host governments in cost recovery. It applies a more disaggregated approach to cost recovery than was followed in last year's theme paper by classifying the issues between benefits and costs. Thus it does not reach general conclusions about the political economy of user fees, but is aimed at narrower technical issues.

RATIONALE

¹ This paper addresses the issue of cost recovery primarily from the perspective of user fees. Another theme paper focuses on social financing as an aspect of cost recovery.

² La Forgia, Gerard and Kirsten Frederiksen, 1991

The focus by economists and health policymakers on user fees and cost recovery in the health sector stems from the value of cost recovery in responding to a number of long-standing problems in the health sector, including the following:

1. **Inadequate Revenue.** Inadequate revenue to support existing government health services, much less to improve them, is a major problem in developing countries. Persistent under-funding of health services was a major problem in many countries during the 1980s. Increasing revenues through cost recovery directly addresses this problem.³
2. **Inappropriate Allocation of Public Budgets.** By charging fees for services that primarily benefit the user (such as curative, physician-based inpatient and outpatient services), governments can reallocate tax-financed expenditures to health sector activities that extend benefits beyond the individual (such as community health, immunizations, and control of communicable diseases). It is widely recognized that health care spending in developing countries is heavily skewed toward personal health services, despite the prevalence of infectious diseases.
3. **Inequitable Public Taxation and Spending Policies.** Tax systems in developing countries tend to be regressive, because the primary sources of revenue are border and crop taxes, which fall heavily on imported consumption goods and agricultural products. Using these tax revenues for spending on health services that heavily subsidizes curative services in towns and cities tends to disproportionately benefit the better-off segments of society. The resulting combination of tax and expenditure incidence in the health sector can be quite detrimental to the interests of the poor. This generalization tends to be more accurate for poorer countries and where the government accounts for a larger share of health sector spending. As income rises, usually the private sector expands, insurance systems develop, and wealthier people begin to move out of the public health system. At any rate, cost recovery programs with provisions for exempting or reducing charges for the poor can improve the targeting of public subsidies by transforming a general price subsidy supported by regressive taxes into a targeted subsidy, albeit still supported by the same taxes.
4. **Poorly Managed Utilization.** When prices are zero or uniformly low across a health care system, from the most expensive hospital services to the least expensive immunization, consumers have no reason to pay attention to costs when they use the health system. In fact, consumers' natural inclination is to use the most costly services, such as a hospital outpatient facility rather than a clinic, because they weigh benefits against zero price. User fees may not completely solve this problem, but they represent a tool for managing utilization patterns.

³ Of course revenue will increase when prices rise only if economic conditions are "right," and these conditions are summed up by the term "price-inelastic demand." Higher prices are more likely to result in higher revenues as consumers are less sensitive to prices in making consumption decisions. Certain conditions make this more likely -- if the good or service is viewed as a necessity, if there is little competition from other providers, and other aspects of market conditions.

There is no single policy instrument that can solve all of these problems simultaneously, but user fees represent an instrument that at least contributes to solutions for all of them. User fees for curative services in the public sector are not a panacea, and they create additional problems that must be solved, including political acceptability, financial management, and risk sharing. Despite initial resistance to user fees as a policy tool in the health sector, developing-country governments and donor agencies have begun to emphasize their potential advantages, and there is considerable interest in experimenting with them. The result is that cost recovery is probably the area of greatest demand for technical assistance from the HFS Project.

ISSUES

The previous section outlined the main benefits that have inspired interest in cost recovery programs. The arguments are logically appealing, but they are *qualitative* in nature, suggesting that cost recovery programs can contribute to increased revenue, improved government allocations, and greater fairness--but not specifying how much. Given that policy change is costly--change is disruptive, has potential political costs, and creates unanticipated problems--the main issues surrounding technical assistance in cost recovery are *quantitative*. For example, does cost recovery make a large enough positive impact on revenues to justify the associated political risks? It is not enough to suggest that the impact is in the right direction; there must be some knowledge of the size of the benefit. Below, the major policy issues related to quantifying the benefits of cost recovery programs are listed, using the same headings as in the previous section.

1. **Inadequate Revenue.** How much revenue can be raised through higher fees? Is the amount of revenue sufficient to justify such a major policy change?
2. **Inappropriate Allocation of Public Budgets.** What actions are required to reallocate public budgets away from personal health services and toward public health activities? The reallocation will not happen automatically when user fees are instituted; rather, additional policy decisions must be made. What types of policy packages are required; what is an appropriate sequence of policy changes?
3. **Inequitable Public Taxation and Spending Policies.** The arguments suggesting that user fees can enhance fairness, despite being counter-intuitive,⁴ are powerful and have convinced many people. However, successful re-targeting of subsidies through user fees would benefit from knowledge of demand patterns, current subsidy patterns, the character of a fee structure that would accomplish the re-targeting, an effective test to identify the poor, and knowledge of the new subsidy patterns after the policy change is put in place. These questions require empirical information that is not readily available in most developing countries.
4. **Poorly Managed Utilization.** How effective is the price system in affecting behavior and causing people to take costs into account when

⁴ It is certainly counter-intuitive to argue that the poor can be made better off after user charges are instituted.

choosing a source of care?

Added to this compendium of possible benefits are costs that also affect the feasibility of instituting user fees:

1. **Accounting and Management Systems.** What additional requirements does collection of user fees impose on the health system in managing accounts and funds, two activities that have been weaknesses of the public sector in the past? Is this a major bottleneck?
2. **Incentives to Collect Fees.** We are discovering that many countries have had user fee policies incorporated into the law for many years but that, for various reasons, health care providers have not enforced the fees. The primary reason appears to be that the revenue from these fees goes to consolidated national accounts and has no impact on the collecting entity's (or the Ministry of Health's) budget.
3. **Citizen Input and Accountability.** Often health services are near-monopolies. Further, public-sector health personnel have few incentives to provide services. Their employment is independent of their performance and its effects on use of services, hence revenues. For example, a single public hospital typically serves a large geographical area in which there are no similar competitors. The notion that this service is a gift from the government to the people may be accepted, along with the abusive provider behavior engendered by separating performance from compensation, as long as the services are free. However, after charges are imposed, some sort of community role in the operation of the facility will be warranted so that those paying the fees have a voice in the disposition of the fee revenue and the operation of the facility.
4. **Political Acceptability.** Although this issue is extremely complex, it represents an important unknown that can restrain politicians' willingness to proceed with cost recovery. In most cases, politicians have little information to allow them to assess objectively the political risks associated with changes in user fee policies. They also lack information on an appropriate package of policies (e.g., user fees combined with improved services) that would attenuate or eliminate the risk.

Resolving every one of these issues is neither necessary nor sufficient for cost recovery policies to succeed; however, we have insufficient experience to allow us to rank them in terms of importance. Furthermore, priorities among these issues probably vary substantially across countries.

HFS APPROACH TO THE ISSUES

This section discusses how HFS has approached each of these issues in its technical assistance during the first two years of the project.

Inadequate Revenue

In Belize, HFS approached the revenue issue by developing simple revenue simulations using utilization statistics for 1989. The simulations allowed HFS to show actual revenues for 1989 for the whole system relative to what would have

been collected under different pricing structures. The pricing structures corresponded to three scenarios designed to illustrate the range of possibilities: (1) low prices--simply enforcing existing prices, which for the most part were set in 1967 and are not enforced, (2) higher prices--1967 prices approximately doubled, which would not even keep up with inflation, and (3) full cost recovery--an illustrative set of prices that would fully recover costs. Although there is no information on price elasticities in Belize, the simulations arbitrarily assumed that any price rise would result in 10 percent lower use of health services. The various scenarios also assumed that 20 percent of patients would receive free services. Costs estimated in a 1987 study were adjusted for intervening inflation.

The resulting estimates show that if existing prices were enforced in Belize City institutions, about 10 percent of recurrent costs would have been recovered in 1989, compared to actual cost recovery of slightly over two percent. District hospitals would have collected about 13 percent of recurrent costs, compared to actual collections amounting to just over three percent. The second scenario, in which prices would be approximately doubled, would result in recovery of about 25 percent of costs in Belize City and 41 percent of costs in district hospitals. Even the doubling of prices would leave charges for many services at nominal levels, such as US\$1.50 for an outpatient visit including a prescription (compared to US\$12 plus prescription costs in the private sector). The full cost recovery scenario showed that an outpatient visit with a single prescription would be priced at about US\$7.25 in the public sector. Some full-cost prices in the public sector would have to be higher than those of competitors in the private sector, however, apparently due to inefficiency in the public sector delivery of the services.

Although the accuracy of these estimates could easily be questioned, an attempt was made to err in the direction of underestimating revenues. The estimates allowed HFS to demonstrate quantitatively, using secondary information available from existing sources, the potential for cost recovery to increase revenues in the public sector. The spreadsheets on which the estimates were based could be understood easily by policymakers, and could encourage them to test alternative pricing strategies.

In **Egypt**, HFS has been assisting the Cost Recovery for Health Project in the beginning stages of its effort to convert 40 hospitals and 10 polyclinics into independent cost recovery centers. In Egypt, HFS is faced with a quantitative goal (set by USAID/Cairo project designers) of 60 percent cost recovery in these facilities (with 80 percent of them achieving operational self-sufficiency). Thus the level of cost recovery is not a policy variable but a goal. It is worth noting that probably the only developing countries in which public hospitals achieve such high levels of cost recovery are China and Korea, two countries where public hospitals are independent institutions and inpatient care is financed to a large degree by social insurance.

In a presentation to USAID/Cairo and the Cost Recovery Project's Directorate, HFS argued that achieving 60 percent cost recovery in Egyptian hospitals would require careful selection of the hospitals. HFS suggested criteria for selection, including high occupancy rates for existing pay beds, potential for expanding pay beds as a percentage of total beds in the hospital, affluence of the population being served, potential for referrals from specialists, availability of insurance coverage for clients, potential for broadening insurance coverage, and willingness of the government staff to change their behavior to cater to paying patients. HFS pointed out that public

hospitals may require large capital investments if cost recovery is to have some chance of success. The Cost Recovery Project is designed to address this issue by investing in the rehabilitation of hospitals chosen to participate in the program.

In a subsequent trip to Egypt, an HFS staff member discovered that there is very little information on the variables proposed. The first two cost recovery hospitals, Embaba Hospital in Cairo and Shark El Medina Hospital in Alexandria, have already been selected. Embaba Hospital currently recovers about 18 percent of its costs, from the eight percent of inpatients and three percent of outpatients who pay for their care (all patients pay a nominal registration fee, however). About a third of the hospital's revenues come from contract agreements with public sector companies for their employees' health care. Embaba has an occupancy rate of 43 percent currently for its 74 pay beds and only about 56 percent overall for the total of 370 beds. A building intended to house another 230 beds has been completed. Shark El Medina is not yet complete and is currently operating only as an outpatient facility. The information available provides only a first approximation of the data HFS suggested is required. Nevertheless, it is clear that these two hospitals will face large hurdles in achieving 60 percent cost recovery.

The shortage of information required to move toward cost recovery dictated the design of the second phase of HFS involvement with the Cost Recovery Project. In this phase, HFS will work with project staff to perform studies necessary to develop pricing options for Embaba Hospital, including a cost study for the hospital, a population-based demand study, and a survey of competing facilities. When these activities are completed in the spring of 1992, we will have a much better basis for predicting the cost recovery potential of the hospital, and will have suggested options for implementing the conversion, as well.

In Haiti, the issue of inadequate revenue was addressed at the facility level by HFS for Mirebalais Hospital. The hospital is a rural 20-bed facility operated by a private voluntary organization (Eye Care/Management and Resources for Community Health). It currently receives subsidies from its operator, USAID, and the Haitian Ministry of Public Health, plus a grant donation. These subsidies apparently account for about 80 percent of income, and the rest is collected through user fees. The grant, which alone accounts for 50 percent of revenue, will disappear in 1991.

HFS developed a spreadsheet-based break-even analysis for the hospital that takes into account unit costs and demand factors. HFS concluded that the hospital's charges are for the most part well below unit costs. HFS recommended that prices be raised by an average of 25 percent and that fee collections be strictly enforced to raise the percent of patients paying from 50 to 100 percent. However, the increase in prices and paying patients also must be accompanied by an increase in patient volume, a seemingly impossible requirement. Taken together, these recommendations paint a pessimistic picture of the hospital's potential for survival without large continuing subsidies. HFS suggested that if subsidies were continued for the next five years and were coupled with aggressive improvements in the quality of care and marketing of services, the hospital could begin breaking even in year six. This diagnosis provides a tool for investigating the potential for cost recovery at the facility level.

HFS is currently completing a financial feasibility study for a second Haitian private voluntary organization hospital, Bon Repos. Operation of this

hospital will be modeled after one currently operating in Cité Soleil, a slum area of Port-au-Prince. The feasibility study is using results from a small household survey as well as cost data from the Cité Soleil model to develop a pricing strategy for Bon Repos. At Bon Repos, there is potential for a prepaid plan to be set up, which opens opportunities for a more sophisticated pricing strategy that includes planned cross subsidies from wealthier members of the prepaid plan to poorer patients who must pay out of pocket.

These three types of studies--national-level simulations of cost recovery potential in **Belize**, pricing strategies for hospitals in **Egypt** to meet cost recovery objectives, and assisting individual hospitals in rural **Haiti** to develop multi-year survival plans--show how important quantitative information on pricing strategies and revenue has become. HFS is working in few countries where general recommendations about cost recovery are either sought or appreciated; most requests are for nuts-and-bolts recommendations about how to proceed and the likely revenue effects. In year three of HFS, work will continue in all of these countries on the same topics, and it will be expanded to the **Central African Republic**, **Ecuador**, the **Dominican Republic**, and **Senegal**.

These examples also illustrate that setting prices for cost recovery is only one part of the equation. The prices must be enforced, the population must be able to pay the prices, other institutional changes may be necessary to enable larger groups of patients to pay the charges, and social financing mechanisms are a desirable complement to cost recovery programs for inpatient care.

Inappropriate Allocation of Public Budgets

In **Egypt**, HFS outlined for the Cost Recovery Project what the goal of 60 percent cost recovery might mean. A number of scenarios were developed for Embaba Hospital. In the first case, the government might maintain its subsidy at its current level and seek to increase contributions from patients by 700 percent, which would raise the level of cost recovery to 60 percent of total income and approximately double total income in the process. This scenario implies a large increase in total resources devoted to the hospitals. A second scenario has the government cutting (and redeploying) its subsidy by about a third but still raising 60 percent of the hospital's total budget from patients. This scenario would result in a lower government subsidy but a total budget about a third higher than the current amount. HFS illustrated a number of other scenarios, but the lesson is clear: a cost recovery target cannot be set solely in terms of percentage of costs covered, because the government must make an explicit decision about the absolute amount of the subsidy it is willing to provide. Deciding the level of subsidy for curative institutions thus cannot be independent of the government's priorities for spending in the health sector, and cost recovery is not a sufficient instrument to solve this problem.

Inequitable Public Taxation and Spending Policies

The HFS Project has not had opportunities to consider this issue in its first two years. However, the project now has a long-term advisor in the **Central African Republic**, where there is considerable interest in cost recovery and improving the targeting of health sector spending. Cost recovery is currently being considered first for rural areas in order to identify additional sources of revenue to support rural primary health programs. If cost recovery programs are started first in rural areas and much later in urban areas, they will not immediately reduce skewed government subsidy patterns, but create the prospect for future improvements.

Poorly Managed Utilization

Although the HFS Project has not completed technical assistance work that directly addresses this issue, HFS proposed work in Togo that would help us understand how pilot programs in cost recovery have affected use patterns. Under the Bamako Initiative, Togo has experimented with cost recovery for drugs in its Central Region, and a number of mission hospitals and the autonomous university teaching hospital already engage in cost recovery. Studying demand patterns created by the resulting variety of cost recovery activities in localities isolated from one another would allow us to understand better the effects of different pricing and exemption practices on demand behavior. This would lead to a better understanding of how to use prices to help manage demand.

HFS also proposed studies in Senegal that have resulted in a buy-in from USAID/Dakar. These studies include analysis of demand data and collection of cost data. The cost study will cover the whole range of facilities available in the public sector, including hospitals, health centers, maternities, health posts, and health huts. This study will put the project in a position to understand how costs vary across all levels of the government system and to couple this information with data on use patterns of the population. The two types of information are the building blocks required to understand the interplay between consumers' use patterns and the cost of care. They will allow HFS to recommend changes in the structure of prices to manage consumers' choices of sources for their care.

Accounting and Management Systems

In Egypt, HFS has worked with the Cost Recovery for Health Project to develop a transaction-based double-entry accounting system for the hospitals that join the program. This system was adapted from the Egyptian Hospital Insurance Organization's cost accounting system and will replace the Ministry of Health's single-entry system. Creating the accounting system has required the development of standards, manuals, and training materials by HFS staff in cooperation with the accounting staff hired by the Cost Recovery Project. The accounting system will help hospitals in the program understand their costs at a cost center level, allowing them to keep track of costs and adjust their charges accordingly.

In Haiti, HFS's study describes in detail Mirebalais Hospital's registration and fee system, which provides an example for other facilities to emulate or improve. The HFS team analyzed the system and recommended a number of changes oriented toward improving the tracking of fee payments, controlling funds received, and following patients through the system. The team also proposed an implementation scheme for an existing accounting system based on a simplified package developed for small retail establishments. Details of the HFS proposals are available in HFS Technical Report No. 4.

Incentives to Collect Fees

This issue has arisen in virtually every country where HFS has been involved. Recommended practice by most economists and the International Monetary Fund is for all tax revenues to be remitted to a single fund. The consolidated fund approach is designed so that allocation decisions for all public programs can be made on a regular basis and the merits and costs of all programs can be weighed simultaneously. The result for the health sector is that user fees are treated as tax revenues and are remitted to the treasury. Budget allocations are made independent of fee collections. This practice virtually ensures that the

health sector will shirk efforts to impose fees; fees represent a nuisance and collecting them is a disagreeable task that has little or no discernable benefit for the collecting institution. This practice of labelling fees for health services as tax revenues is inappropriate, as they are charges for using services that are provided by the government.

In **Cameroon**, HFS assisted USAID/Yaoundé to draft a "Project Assistance Initial Proposal" (PAIP) for development of a "Nonproject Assistance Agreement."

The question of the disposition of fee revenues was tackled directly as part of the preparation for the proposal. The Ministry of Health identified the problem of not allowing facilities to retain fees as one of the primary bottlenecks in improving health sector financing. It had succeeded in getting waivers for pilot tests and had determined that fee retention was essential for greater community involvement in the financing and management of health services. One argument used in **Cameroon** that may be valuable elsewhere is that by allowing facilities to retain a percentage of their fee revenues, the Ministry of Finance may realize a net increase in revenue. Although the Nonproject Assistance Agreement will not go forward at this time, it is clear that the Ministry of Health has already begun to solve one of the key impediments to increasing revenues through cost recovery.

This problem has been resolved in **Egypt** in order to allow the Cost Recovery Project to proceed with facility-level retention of fees. HFS has recommended that it be resolved in favor of facility-level retention in **Belize** and **Togo**. It is also likely to become an issue in **Ecuador** and **Pakistan**.

Citizen Input and Accountability

HFS addressed the issue of citizen input in cost recovery programs and accountability of cost recovery facilities to their clients only in **Zaire**. There HFS recommended that the SANRU Project work to strengthen the role and performance of health zones' community oversight boards (conseils d'administration). Such citizen "boards of directors" have been operating for many years in **El Salvador**. Many countries also have considerable experience with local school boards. Both types of experiences can be studied or tapped by HFS in the future as this issue comes up. It is not clear what approach will be used in **Egypt** and whether HFS will have any role there in recommending policy changes in this area. The issue will certainly come up in **Belize** as it begins implementing recommendations for cost recovery during the upcoming second phase of HFS assistance.

Political Acceptability

HFS has attempted to involve local decision makers in its studies through steering committees and workshops. In **Belize**, all trips related to the buy-in ended with a debriefing to the Minister of Health. In **Egypt**, technical assistance activities have been undertaken with close cooperation between HFS staff or consultants and the Ministry of Health, the Cost Recovery Project Directorate, and USAID/Cairo staff. An interministerial steering committee and a donor committee were involved with HFS program participated with HFS in the evaluation of financial aspects, including cost recovery performance, of the SANRU II Project in **Zaire**. This feature is built into technical assistance in cost recovery planned for **Senegal** and the **Central African Republic**.

However, the HFS Project recognizes that decision makers often have

inadequate information about the reaction of the population to changes in cost recovery policies. In **Belize**, for example, there is no population-based information on household health expenditures or use patterns. In many countries, including the **Dominican Republic**, the **Philippines**, and **Peru**, simple information about how consumers use the health system and how much they already pay for health care (while by-passing the free public system) has shown politicians that the citizenry may be far ahead of politicians in recognizing public sector problems. In **Peru** a rapid survey of 300 households funded by HFS core resources was conducted to provide first-approximation estimates of private spending on health services as part of a project design.

The HFS Project used core applied research funds to add questions on health care utilization patterns, expenditures, and willingness to pay for health services to a USAID/Belize City-funded household demographic survey. The survey was fielded in early 1991, and the results will be available to policymakers in the fall of 1991. HFS also sponsored, through buy-in funds, a questionnaire to be administered through the Chamber of Commerce to inquire about employers' views of the health care system. In the fall of 1991, HFS also plans to use core applied research funds to lead focus groups to investigate consumers' views of quality in the public and private health care systems. These three survey activities will provide policymakers with considerably more information about how citizens use the health system, how employers view it, and how carefully selected, representative groups describe in qualitative terms their views about quality of care and the health care choices available to them. We expect this information to reduce to a considerable degree the risks perceived by politicians when considering changes in cost recovery policies.

FUTURE DIRECTIONS

This review has stressed two points: (1) the quantitative nature of the requirements for implementation of cost recovery programs, and (2) the fact that cost recovery is a valuable policy tool but does not free Ministries of Health from the problem that multiple objectives require multiple tools. An indirect result of the exercise is the realization that population-based information about consumers is valuable to support almost any change in cost recovery policies if governments are interested in fairness and the effects their policies will have on consumers.

The HFS Project has made a good start in several areas, particularly in developing tools for revenue projections, management, and accounting. In its applied research, the project is moving forward in means testing, or protecting the poor under cost recovery, and understanding the intertwined issues of price, quality, and willingness to pay.

Areas in which additional work is merited involve better understanding packages of policies that would meet the multiple objectives that governments and donors seek when they consider cost recovery. A shortcoming of both this project's work and that of others in the field is that it has been oriented to introducing cost recovery programs. The world would also benefit from evaluations of how well these programs work and how their effects correspond to the objectives of the policy change. HFS can react to that need by cooperating with missions and host governments to build a careful evaluation component into policy reform plans. In addition, documentation of how to proceed from start to finish with a policy change in cost recovery would be invaluable.

DOCUMENTS CONSULTED⁵

- Bitran, Ricardo. "Trip Report for Jordan, November 14, 1990." HFS Project.
- Frederiksen, Kirsten. "Trip Report for Haiti, September 24 - October 14, 1990." HFS Project.
- Frederiksen, Kirsten and Serge Fernandez. "Tools for Break-Even Analysis and Financial Control at Mirebalais Hospital, Haiti," April 1991. HFS Technical Report No. 4.
- Health Financing and Sustainability Project. "Interim Report, September 19, 1989 - March 30, 1990."
- Health Financing and Sustainability Project. "Interim Report, October 1, 1990 - March 31, 1991."
- Health Financing and Sustainability Project. "April, 1991, Monthly Report."
- Health Financing and Sustainability Project. "May, 1991, Monthly Report."
- Health Financing and Sustainability Project. "June, 1991, Monthly Report."
- Hildebrand, Stan. "Trip Report for Cost Recovery for Health Project, Ministry of Health Facilities, Arab Republic of Egypt, March 13 - 29, 1990," HFS Project.
- Hildebrand, Stan. "Trip Report for Cost Recovery for Health Project, Ministry of Health Facilities, Arab Republic of Egypt, August 24 - September 14, 1990," HFS Project.
- Hildebrand, Stan. "Trip Report for Cost Recovery for Health Project, Ministry of Health Facilities, Arab Republic of Egypt, November 26 - December 15, 1990," HFS Project.
- Hildebrand, Stan. "Trip Report for Jordan, April 20 - May 18, 1990." HFS Project.
- La Forgia, Gerard and Charles Griffin. "Health Sector Cost Recovery in Belize: Current Situation and Prospects for Change," July 1991. HFS Technical Notes, HFS Project.
- La Forgia, Gerard and Kirsten Frederiksen. "HFS Theme Paper: Cost Recovery," January 1991. HFS Project.
- Lewis, Maureen, and Harry Cross. "Trip Report for Jamaica, March 4 - 9, 1990," HFS Project.
- Makinen, Marty. "Trip Report for Haiti, May 13 - 19, 1990," HFS Project.
- Makinen, Marty and Brad Barker. "Trip Report for Senegal, October 17 - 26,

⁵ All consulted documents are included in this list, but material from several has not been included in the text.

1990," HFS Project.

Makinen, Marty and Brad Barker. "Trip Report for Togo, October 27 - 31, 1990," HFS Project.

Roberts, Richard S. "Trip Report for Jordan, February 26 - March 2, 1990." HFS Project.

Roberts, Richard S. and Stan Hildebrand. "Trip Report for Egypt, March 2 - 9, 1990," HFS Project.

Setzer, James. "Trip Report for Central African Republic, January 13 - 18, 1991." HFS Project.

Setzer, James. "Trip Report for Republic of Cameroon, January 6 - 13, 1991." HFS Project.

Setzer, James and Marcia Weaver. "Assessment Report for Central African Republic, November 5 - 18, 1990." HFS Project.

Setzer, James and Marcia Weaver. "Trip Report for Central African Republic, November 5 - 18, 1990." HFS Project.

Stevens, Carl M. "Trip Report for Egypt: Cost Recovery Programs for Health, August 24 - September 14, 1990," HFS Project.

Wong, Holly. "Trip Report for Egypt: Cost Recovery for Health Project, May 10 - 24, 1991," HFS Project.

Wong, Holly. "Trip Report for Egypt: Cost Recovery for Health Project, December 3 - 14, 1990," HFS Project.

HEALTH SERVICE COSTING

by

James C. Setzer

INTRODUCTION

The desire of many developing countries to provide more health services to a greater number of people has led governments to recognize the need for reform in the manner in which those services are financed. Many governments have begun to redefine their roles in the delivery and financing of health services. The roles of their various partners (the community, donors, the private sector) are also being discussed and redefined. The policy dialogue that has accompanied this redefinition has encouraged governments to examine expenditures for health services and the allocation of resources.

With the increased focus on finance and allocation of resources within the sector, greater attention is being paid to the cost of health service delivery. Governments recognize the need to develop delivery systems that are cost effective if they are to reap maximum benefits from limited resources. It is clear that the capital and operating costs incurred by various strategies and programs are major determinants in the choices made at all levels. The focus on finance and resource allocation within the health sector should be viewed as an encouraging development when and where reliable information on the costs of competing options is known. Unfortunately this is not always the case. The lack of demand for, and inexperience in the use of, cost information is discussed in the HFS Year One Technical Theme Paper on this subject (Frederiksen, 1990). During the past two years, the Health Financing and Sustainability (HFS) Project has sought to inform decision makers of the importance of cost information in choosing among options. It has also provided technical assistance to USAID missions, private institutions, and host-country governments in estimating the costs of various programs and/or service delivery mechanisms. During year two, HFS has also outlined an Applied Research Agenda that will provide insight into several of the methodological limitations related to the collection and use of cost information.

On a more micro scale, information on the cost of service delivery is also an important tool in the management of health facilities. Cost recovery mechanisms and decentralization of planning and management functions have become a priority of many governments. As a result, facility managers increasingly are required to be aware of costs and revenues in order to stay within the boundaries imposed by often shrinking budgets. As more managers implement cost recovery mechanisms, they require reliable cost information to set fees and monitor the degree to which revenues are able to cover costs. Once again, the HFS Project has worked to provide information on the cost of services to assist program and facility managers in these efforts.

This paper examines the HFS Project's experience in health service costing during the first two years of project activities (September 1989 - September 1991). It provides summaries of ways that costing information has been used to improve service delivery and increase access to services. During the first two years of project activity, the costing of health services has been seen as an integral tool to improve the financial sustainability of health service delivery, rather than an option for policy reform or improved management itself. As such, HFS experiences with technical assistance in this area do not necessarily yield

generalized results that are directly applicable to other situations and environments. However, the experiences discussed in this paper will demonstrate ways in which this tool has been adapted and used in many settings. This should encourage planners and decision makers to develop and use cost information to improve the delivery and increase the availability of health services.

During year two, costing has been used as a tool in addressing questions in all four of the other technical areas identified in the HFS mandate. Those technical areas are:

- **cost recovery;**
- **public-private collaboration;**
- **resource allocation; and**
- **social financing of the demand for health services.**

The discussions of HFS experiences and the advice provided are grouped according to these technical areas.

RATIONALE

As discussed in the year one HFS Technical Theme Paper, the major issue confronting the HFS Project in this area is one of improving the quality and use of cost information to improve management and define policy options. That paper cited the following as obstacles to the effective use of costing as a management or policy tool:

- Lack of demand for cost information;
- Lack of understanding and experience in the use of cost information for improved management and policy review;
- Methodological limitations in the estimation of the cost of certain services; and
- Lack of a clear agenda for research to address those methodological limitations.

HFS has addressed all of these issues through activities during its first two years. As more countries (especially in the African region) have begun to develop mechanisms to increase cost recovery, there has been an increased demand for cost information. HFS has emphasized this point in discussions with ministry and USAID mission officials in a number of countries. HFS presentations at the recent LAC Bureau Health Population and Nutrition Officers' Seminar in Miami are another effort to stimulate demand for this type of information through increased understanding of its importance and usefulness.

Increasing demand for cost information has led to increased availability of and experience in the use of this information as well. HFS has worked with planners and managers in a number of settings to take available cost information and transform it into policy and management options.

The HFS Applied Research Agenda takes into account the need for improved methods for estimating the cost of certain services and/or programs. The major applied research project in the areas of efficiency of production and incentives to improve efficiency will require that reliable estimates of service costs be

available to allow researchers to measure the efficiency of their production. It is anticipated that these efforts will demonstrate new and improved methods for the calculation of service costs.

The experiences are many. During year two, HFS worked in collaboration with officials in a number of countries to stimulate demand for cost information and to demonstrate its usefulness in planning and management. HFS has, in the cases of the preventive and primary health care study in Kenya and Bon Repos Hospital financial feasibility study in Haiti, used cost information in rather innovative ways (more is said about each below). As the results of these studies have been disseminated, a number of other countries have expressed interest in learning more about them and the possibilities of adapting their methods to their own specific questions and health systems.

During year two of the project, HFS performed technical assistance assignments in a number of countries that have involved the collection of data on health service delivery costs. These countries include:

- Kenya
- Peru
- Belize
- Central African Republic
- Haiti

This paper will discuss how costing information was used in each of these countries to address management and policy questions. Note that, in many cases, the cost information developed through HFS technical assistance has been used to provide insight into more than one of the project's technical areas. Therefore, certain studies may be mentioned in one or more of the discussions of those technical areas found below.

HFS EXPERIENCES AND ADVICE OFFERED

Cost Recovery

HFS has assisted a number of countries to design and implement mechanisms allowing health systems to recover costs, or to improve the performance (i.e., the ability to generate revenue) of existing cost recovery mechanisms. In many instances these mechanisms depend upon the collection of user fees from patients receiving curative services. Officials in many systems would like the revenues collected in this manner to generate surpluses to help pay the cost of preventive services, as well. The importance of estimates of costs of services to allow managers to set fees and evaluate the ability of collection mechanisms to recover costs is clear.

In Haiti, HFS has worked closely with the staff of the Centres pour le Développement et la Santé (CDS), an indigenous PVO, to estimate the costs of providing both inpatient and outpatient services at Bon Repos Hospital. The hospital, a government facility located on the outskirts of Port-au-Prince, will soon re-open its inpatient facilities under CDS management as the largest private hospital (approx. 300 beds) in Haiti. It will charge fees which, it is anticipated, will be used to pay operating costs. CDS wanted to estimate the costs of the major services to be delivered (maternity, pediatrics, general medicine and surgery) in order to set fees for those services. These estimates were also to be used to study the financial feasibility of combining

establishment of prepaid insurance coverage to local industries, private rooms for those willing to pay for those services, and subsidized hospital services for "community patients" with limited ability to pay.

CDS asked for estimates of the operating costs of the major services. These estimates will not include capital, equipment, and renovation costs from donations (Bon Repos will require renovations before it can be re-opened). Operating cost estimates were derived from data obtained at the Hôpital St. Catherine de La Bouré, another CDS-operated hospital located in Port-au-Prince. Of particular concern was the estimation and allocation of personnel costs among services at the hospital. From the data, it was possible to estimate the average per-patient cost for each of the four major services. These estimates permitted HFS to develop a series of patient volume/price scenarios. HFS developed a computerized model which allows HFS and CDS staff to study the possible effects of these scenarios on facility revenues.

As a result, HFS provided CDS with a number of options for setting patient fees and insurance premiums to be instituted when the facility opens in late 1991 (the maternity service was to open in September 1991, with other inpatient services to follow over a period of months). CDS will choose among options to set fees and premiums, taking into account the socio-economic status of the community, the market for services, objectives for cost recovery, and the anticipated patient demand for services.

In the Arequipa region of Peru, a study of the financing and cost of regional health services (public, quasi-public, and private) was combined with a sample survey of household health-service utilization patterns. The study provided a series of recommendations to regional health officials concerned with improving the performance and efficiency of service delivery. The report of this study recommended that a more accurate and detailed study of the cost of services be carried out in government health facilities. The results of this study would be used to review and modify the fees charged for services in those facilities (ear-marked taxes as an alternative revenue generation option are discussed, as well). In conjunction with the review of the fee structure, the report also recommended a review of financial management systems and exemption mechanisms for protecting the indigent.

In Belize cost information was used to evaluate the performance of current fee schedules and collection systems to assess their ability to recover costs. Results indicated that current fee collection efforts recovered approximately two percent of recurrent costs. This poor performance is due to low levels of collection (only eight percent of inpatients and three percent of outpatients at Belize City Hospital paid any fees) and prices that do not reflect the costs of service delivery (prices have not been modified since 1967). Using cost information, HFS developed and demonstrated several partial and full cost-recovery simulations to assist the Government of Belize to evaluate the potential effect on revenue of modifications in fee schedules. HFS used the results of these simulations to recommend that the Government of Belize pursue cost recovery at all levels of facilities through increased fees, increased levels of financial autonomy for facilities (i.e., the ability to retain and expand a percentage of revenues generated), and improved means testing to protect the indigent.

A study of the cost of preventive and primary health care (P/PHC) services was performed with HFS assistance in Kenya. The study estimated the current cost of delivery of P/PHC at public facilities. It also recognized that these costs were being incurred by a system that was performing at levels well below

capacity. It was therefore necessary to define levels of service delivery that would represent full capacity operation of the system. The study is unique in that estimates of the cost of full capacity of operation were developed, and compared to current expenditure levels, to calculate a funding "gap." The study then examined the potential for fees collected at facilities through a program of "cost sharing" to fill that gap. The study indicated that current rates of collection, and a stated health policy that requires that at least 25 percent of revenues be used to finance P/PHC services, should allow the Government of Kenya to fill 15 percent of the P/PHC funding gap.

In an effort to achieve financial self-sufficiency at the Mirebalais Hospital in rural Haiti, Eye Care MARCH, another indigenous PVO, requested HFS assistance in performing analyses of costs, break-even prices, and the hospital's financial and control systems. Results indicated that current fees charged were well below the average cost of those services. HFS developed a computer model based upon estimated service costs, patient volume, and collection rates at the facility. This model allowed Eye Care staff to assess the revenue potential of suggested modifications in fee schedules and rates of collection.

Public-Private Collaboration

HFS has a mandate to study methods by which collaboration between the public and private health sectors may improve the financing of health services. In many cases, this has centered on the identification of situations where private sector providers of care or other services may be able to provide services more efficiently than the public sector. Cost information, therefore, plays an important role in the comparison of providers.

The HFS report to the government of the Arequipa region in Peru recommended that the regional government consider modifications in the prices charged for private beds at public hospitals. The study also recommended that fee structures at public facilities be modified based upon estimates of costs. This recommendation came from results indicating that current prices at public facilities were well below costs. This meant that government resources were being used to subsidize private beds in those facilities. The study recommended that cost data be used to restructure fees for those beds, such that they break even or generate surplus revenues that could be used to subsidize the provision of public services.

The same study also analyzed the availability and cost of drugs at health facilities and pharmacies in the regions. The cost of drugs is a major component of the non-personnel operating cost of services. Recommendations were made to improve the management of drug stocks at all levels and thereby reduce costs and/or increase their availability. HFS suggested that the most cost-effective means for the improvement of the drug management and supply network might be through contracts with private firms to replace the current parastatal monopoly.

In both HFS costing activities in Haiti, the facilities studied (Mirebalais and Bon Repos Hospitals) are public structures operated under agreements with PVOs. The Government of Haiti provides subsidies for the operation of the facilities through partial support of personnel costs. Cost information provided through HFS technical assistance will allow both facilities to set fees and recover costs to decrease their dependence on donor support.

Resource Allocation

Cost information is of critical importance as decision makers attempt to evaluate the allocation of scarce resources. Numerous studies of government expenditures for health services have demonstrated anomalies, inefficiencies, and inequities in their distribution. As decision makers attempt to address these problems and reallocate resources, cost information will be necessary to evaluate and choose among the many options and programs possible. The potential importance of cost-effectiveness analysis in guiding decision makers is clear.

The study of the P/PHC financing gap in Kenya is a good example of the use of cost information to assist the Ministry of Health to estimate the total resources required for full-capacity operation of its P/PHC program. P/PHC has long been a stated priority of the Government of Kenya, based upon its cost effectiveness. USAID currently supports Kenya's efforts to improve the financing of health programs through a non-project assistance (NPA) grant to the Ministry of Health.

The P/PHC study employs a unique approach to calculating the cost of the program. The P/PHC program in Kenya does not function at full capacity due to resource limitations. Rather than define current expenditures made by the program as its cost, the study estimates the total cost of the program if it were functioning at full capacity. This type of information gives decision makers a much clearer picture of the magnitude of the resource shifts that must take place if the P/PHC program is to operate at full capacity. By providing a detailed breakdown of the overall funding gap by budget item (drugs, equipment, transport, etc.) the study also allows decision makers to prioritize and target resources as they become available to the P/PHC program (either through a reallocation of existing resources or through additional support from government or donor sources). The cost estimates obtained in the study were used to develop a computer spreadsheet program that allows the MOH to monitor the financial resources allocated to P/PHC in the recurrent budget. The program also allows the government to project additional resources required for the expansion of the P/PHC program.

In the Central African Republic (CAR) HFS performed a rapid assessment of public sector expenditures (i.e., cost of services to the government) and resource allocation as part of an overall assessment of health financing issues. The assessment showed that personnel and hospital services (especially in Bangui, the capital) consumed excessive proportions of public health resources. This is in contradiction with stated health policy. The study was used to build a consensus around a work plan to move toward a system of greater cost recovery within the health sector.

The HFS study of health resource allocation in Belize calculated government expenditures per capita by program and service, leading to recommendations that the MOH modify its budget process and grant more financial and managerial autonomy to the district level.

Social Financing of the Demand for Health Services

The development of social financing or risk-sharing mechanisms is, in some cases, a feasible method of financing the cost of health services, while protecting individuals from large financial losses. The availability of grouping mechanisms and service-cost information with which to correctly calculate premiums is essential to the development and/or sustainability of social financing mechanisms.

In Haiti, estimates of the cost of service delivery at Bon Repos Hospital will be instrumental in a decision by CDS, the PVO which operates the facility, about what price to charge local groups for prepaid medical insurance plans. Using estimates of costs and utilization rates, HFS provided CDS with projections of the profitability of the proposed plan based upon a series of premiums and co-payment combinations. The insurance plan will be marketed by commercial brokers.

FUTURE DIRECTIONS

HFS will continue to work closely with USAID missions, private institutions, and host-country governments to improve the financial sustainability of health services. It is clear that the availability of reliable information on the cost of services will play a key role in the planning, management, and evaluation of those services. As new technologies and methods become available that allow more efficient and/or effective delivery of services, resources may become available or additional resources may be needed. This will require that reallocation decisions be made in keeping with policy objectives. HFS will continue to provide assistance to decision makers in the collection and use of cost information in these efforts.

There are a number of potential sites where HFS will provide assistance in the collection and use of cost data in the coming year (year three). Those that are known include:

- The CAR, where HFS plans to develop of a methodology to estimate the cost of primary care programs. This will allow MOH officials to prioritize programs and/or generate additional resources to meet anticipated costs. This study will differ from that performed in Kenya by providing cost estimates by individual components as opposed to global estimates of P/PHC costs.
- Egypt, where cost estimates will be used to allow hospital officials to set prices, including internal cross-subsidies, as 50 facilities implement cost recovery mechanisms.
- Fiji, which has requested assistance to evaluate the performance of cost-recovery mechanisms already in place in public hospitals. Cost information will be instrumental in evaluating fees and percentage of costs recovered through those mechanisms.
- In Senegal, HFS will perform a study that will use cost information to evaluate the extent to which local funds (fees and other contributions) currently are covering operating costs of public health facilities at all levels (health huts, health posts, health centers, and regional hospitals). This study will be part of a large applied research effort that will evaluate the efficiency of service delivery at different levels of both public and private providers.
- Pakistan has requested that HFS study ways to improve cost recovery in public facilities. HFS is to consider possibilities to modify the current user fee system and certain cost containment measures, such as the encouragement of more cost-effective patterns of prescription and use of pharmaceuticals.

- **Uruguay**, where the government wishes to study the effects of an aging population on the total cost of providing health services.
- In **Ecuador**, cost estimates will be used by HFS to evaluate the sustainability of two USAID-supported health clinics and provide insight into prospects for the replication of such models in other areas of the country.
- In the **Dominican Republic**, HFS will use cost information to help develop new USAID-funded projects in the health sector.
- HFS has developed a computerized health finance model which will be tested using cost, health, and demographic data from **Indonesia**. The model will be used to demonstrate the financial implications of various policy options for the development of health services.
- **Mozambique**, which wishes to improve the financial sustainability of its health services through increased efficiency and, perhaps, a program of cost recovery. HFS will help estimate the cost of health service provision to define options for such improvements.
- The HFS **applied research** efforts in the area of incentives for the improvement of public-sector efficiency will rely heavily on cost estimates to define system efficiency. These efforts will require HFS to develop new methods for the estimation of health system costs.

It is clear that costing will continue to be a major area of study and technical assistance for HFS in the coming year(s). The issues surrounding cost information will continue to provide direction for project efforts in this area.

PUBLIC-PRIVATE COLLABORATION

by

Harry E. Cross

INTRODUCTION

Purpose of this Paper:

This paper presents a brief discussion of key issues and approaches encountered in the first two years of HFS work in the area of public-private collaboration in health financing. It concludes with a section based on this experience describing the types of activities that may be of interest to A.I.D. and its missions in the next three years.

Defining Public-Private Collaboration:

The private sector encompasses both for-profit and not-for-profit providers of health services, and ancillary goods and services that are not directly part of the government-supported system. The private sector includes fee-for-service providers (physicians in private practice, clinics, hospitals, pharmacies, drug sellers, and traditional healers), health maintenance organizations, insurers or other third-party payers, and firms providing support services, such as food and laundry. The private sector also includes all consumers who utilize private sources of health services and products. With the exception of a number of African countries, the for-profit private sector comprises the large majority of private health services, with PVOs and NGOs accounting for the remainder.

The public health sector, on the other hand, is composed of the government agencies responsible for allocation of funding for public health activities; establishment of norms and regulations for public and private health care institutions and providers; collection of information and compilation of health statistics; financing of health care through social insurance (often within Social Security); training of health care personnel; and direct provision of services, from primary through tertiary levels.

In nearly all settings, even those with comprehensive and accessible public services, a substantial share of curative health care is provided by private health professionals or traditional healers. Several studies have found that private, fee-for-service providers are the dominant form of outpatient care in developing countries, particularly in rural areas. Indeed, in many countries the proportion of health expenditures accounted for by the private sector far surpasses that of the public sector.

The scope of both the private and public sectors hints at the myriad relationships that can exist between the two. The private sector may exist quite apart from the public sector, related only through the State's regulatory activities. Such is the case in Ecuador, where the interaction between public and private sectors is mainly regulatory. On the other extreme, public and private sectors may be highly integrated, with the public sector contracting the majority of services to private providers, as in Brazil, or with government-paid health workers working within non-profit private systems, as in Zaire and Haiti.

The health care market can be shared by public and private sectors along

two dimensions: types of services, and types of patients served. In most cases, the private sector is thought to be best equipped to provide curative care and ancillary services, while the public sector takes responsibility for preventive health care, broadly defined. And, while the private sector tends to provide services to patients who can pay, the public sector is usually given the mission of taking care of those who lack geographic or financial access.

For the purposes of the HFS Project, the definition of "public-private sector collaboration" encompasses 1) the interaction between these sectors and its effect on private behavior, and 2) the independent behavior of the private sector. The latter is an integral part of the definition, since the extent and character of the private sector have a considerable impact upon the scope and responsibility of the public sector.

RATIONALE FOR PUBLIC-PRIVATE COLLABORATION

Since the early 1980s, most developing-country health budgets have tightened, the growth in health care costs has continued to outstrip general inflation, and decision makers have begun to consider "market solutions" among the many possibilities for meeting the demand for health care. As a result, developing-country governments and international donors are giving increasing attention to the potential for increased private sector involvement in health. There are several arguments for expanding the role of the private sector in health care in the developing world.

- Increased private sector activity theoretically can ease pressure on government health budgets. A carefully orchestrated expansion of the private sector could potentially shift people who can pay for services away from strained public delivery systems, and permit the government to do a better job of targeting its assistance to disadvantaged groups.
- The private sector is thought to be more responsive to market incentives, and therefore more efficient than the public sector.
- The demand for private health services is income-elastic according to some studies: as real income rises, the demand for private care tends to increase.
- Evidence indicates that urbanization, along with income, increases the demand for private health services. Urbanization is still occurring at a rapid pace in the Third World, which, along with rising incomes, increases the demand for private health care.
- In intermediate-income countries, a demographic/epidemiologic transition is occurring, raising the demand for curative care, and shifting the balance of health needs from those that are best addressed through collective health interventions to those that require more individual-level, usually private, care.
- From the point of view of governments and donors, expanding private health services is potentially a highly leveraged activity, creating a significant effect with a relatively small investment. For example, the U.S. Government invested a relatively small amount to stimulate mainly private, pre-paid managed health systems in the

U.S. in the 1970s. The result is that 100 million Americans now finance their health care through PPOs and HMOs.

Although expanding private sector provision of health care has numerous potential attractions to governments and donors, there is a need to be cautious. The arguments above are largely assumptions or generalizations based on theory and limited research. Before pushing "private sector" solutions onto developing countries, it is wise to analyze the consequences of public-private approaches for key health financing issues such as efficiency, equity, and cost-effectiveness before, during, and following implementation of changes. Improving our understanding of how to expand the private provision of health care and of the efficiency and equity consequences of such expansion is one of the principal mandates of the HFS Project.

ISSUES ENCOUNTERED BY HFS

The HFS Project has now been operational for two years. During that time, it has encountered public-private collaboration issues in several countries, including Belize, the Central African Republic, the Dominican Republic, Ecuador, Haiti, Kenya, Pakistan, Peru, the Philippines, Senegal, and Zaire. The design of the HFS Applied Research Agenda has also focused on public-private issues. Several key issues have emerged from the first two years of HFS activities. These issues are perhaps best understood in the context of HFS technical assistance and research as "constraints" to greater participation of the private sector in health care financing (the objective of this component of the HFS Project). These are listed below and discussed in the following section. The first issue is a general one cutting across the whole technical area. The remainder are more specific.

1. Little is known about the supply of and demand for privately-provided health services, and about what opportunities exist for expansion of the private sector in developing countries.
2. The private sector is restricted by policy and regulatory barriers.
3. Lack of development of credit markets to finance private hospitals and clinics may inhibit private growth.
4. The private sector lacks the managerial, administrative, and financial systems to provide managed or pre-paid health care.
5. Most developing countries do not have adequate insurance or other third-party payment systems to finance private services.
6. There is inadequate understanding of public-private interactions.

HFS APPROACH TO THE ISSUES

1. Little is known about the supply of and demand for privately-provided health services, and about what opportunities exist for expansion of the private sector in developing countries.

One type of technical assistance frequently requested from HFS in its first

two years has been project design. HFS staff members have assisted USAID missions in the design of projects in Belize, the Dominican Republic, the Philippines, Cameroon, and Peru. One of the great constraints to the development of effective projects with "public-private" components is the lack of information about the private sector. This lack of information about the private sector makes it difficult for Missions and host-country governments to gauge the potential outcomes of proposed programs, and makes project design problematic.

This lack of information is encountered on several levels. First, in many HFS countries there exists little basic information on the numbers and geographic locations of private hospitals, clinics, and private physicians, and on the types, costs, and prices of services they provide. Not knowing this basic data could imperil any attempt, for example, to expand private insurance, since the physical capacity of private providers to respond to financing would be undetermined. Similarly, not knowing the prices of private services and the groups who can afford them could prevent a government from implementing programs to shift some groups from the public to the private sector.

Second, basic information about the private sector is often not sufficient to design or implement reforms and programs. It is necessary to understand how the private sector responds to incentives such as the regulatory environment and taxation policies. Thus, more information on the determinants of private sector use must be developed for effective bilateral development and implementation.

Finally, it is important to simulate or demonstrate in a credible manner the consequences of proposed policy and program actions. A government is much more likely to adopt policy and structural reforms if there is reasonable evidence that the reforms will achieve their financing objectives while improving efficiency and equity outcomes.

In regard to opportunities, missions and governments generally do not have a clear picture of *what private sector financing and delivery mechanisms already exist*. In the countries where it has focused on the private sector, HFS has discovered numerous spontaneous experiments in alternative health financing. These "experiments" are always local responses to the crisis in public sector health care. Studying, documenting, and improving these local responses is a highly cost-effective way for A.I.D. and host-country governments to develop public-private collaboration strategies without engaging in costly and time-consuming demonstration projects.

HFS Approaches: In almost all countries, HFS staff have worked with missions to help develop critical information on the private sector as part of larger health financing reform efforts. Assistance has included collecting and analyzing data on the basic characteristics of the private sector. An example of this is the HFS study of health financing in the Arequipa region of Peru. This study assembled for the first time *baseline health sector information* for both the public and private sectors of a Peruvian province. Specific information in the "public-private" category included data on the size and utilization of the private sector and financing arrangements. This study comprised an essential input into USAID/Lima's decision to develop its first health financing bilateral agreement. Similar work will be completed in the Philippines by the end of 1991.

Other information collection activities will analyze data on the *determinants of private sector use*. In Ecuador, the Mission is funding the

collection and analysis of information on opportunities to expand financing and services through the for-profit private sector. This study is part of a longer-term USAID/Quito strategy (which HFS is also helping to conceptualize) to develop a major project in health financing. As another example, the HFS Applied Research Agenda calls for developing information on the *determinants of the development of health care markets* in different settings.

Again in Peru, HFS conducted a rapid household survey of health services utilization and spending in areas to be covered by a project under design. The results of the survey provided critical information about the potential of low- and middle-income households to pay for privately-provided services.

Finally, in the area of simulations and demonstrations of policy consequences, HFS is developing a *health sector financing model* in which baseline data are used to simulate the consequences of policy and structural changes, including those that affect the scale and scope of the private sector. This type of model, with the appropriate baseline information, has the potential to make major contributions to policy dialogue and project/program design activities.

All of the information developed by the HFS Project on public-private collaboration has the effect of raising the awareness of missions and host governments about the potential contributions of the private sector to improving health care. Raised awareness and better understanding of how the private sector can contribute to a government's health objectives is a major step in expanding health services in almost all countries.

2. The private sector is restricted by policy and regulatory barriers.

Policy and regulatory constraints are often cited as obstacles to expansion of private sector activities, including privatization. Despite this conventional wisdom, little work has been done to examine and understand the relationships between policies and regulations and the demand and supply of health care. HFS has promoted a better understanding of these relationships in regard to the private sector, not only in its overall technical assistance activities, but especially in the area of Non-Project Assistance (NPA), where policy and structural reforms are key objectives.

Policies and regulations surrounding public-private collaboration take many forms. On the regulatory side, they can pertain to taxation, personnel licensing, facility certification, import codes, price controls, health service operational norms, insurance, and employment, among others. On the other hand, government policies affecting private behavior are broad and can include the structure of public services (location of facilities, target groups, charging for services, etc), financing arrangements (reimbursements of private providers) and subsidies, medical and management training programs, the credit structure, the trade structure, etc. Political issues are also included in this category, because in many countries, they are the most important health policies. No-charge health care provided by government is often mandated by decree, party platforms, or even through the constitution. This mandate has enormous direct and indirect effects on private providers and government financing policies.

In several instances, HFS has sought to assist missions and governments to map out the policy and regulatory environment as part of an overall diagnosis of health sector financing. This usually includes a broad assessment of policies and regulations followed by a concentration of study and analysis on specific areas affecting public-private collaboration (or other technical areas, as

appropriate). Specific policy and regulatory issues subject to HFS study have included price-setting policies, public financing policies (including social security), labor and insurance regulations, and privatization policies. HFS assessments are aimed at identifying key policy/regulatory barriers, understanding their effects on health financing and delivery, and presenting viable analyses of potential reforms.

HFS Approaches: Policy and regulatory issues are central to HFS work in several countries. In general, HFS policy and regulatory analyses are among the first steps to developing a program of technical assistance and research.

In Pakistan, for example, the Government is interested in evaluating its role as a regulator of the private sector to ensure the growth of appropriate and high-quality private health care. HFS assisted the Government to understand its regulatory role in the areas of investment codes, group practice licensing requirements, medical equipment acquisition procedures, accreditation standards, capital and financial requirements for private facilities, credit policies and practices, and insurance laws. The objectives are to understand how these regulations affect the cost and quality of the supply of private services, and to determine which have the most effect on the expansion of private health care.

Other examples of HFS technical assistance on regulatory matters are occurring in Haiti, Belize, and Senegal. In initial discussions over an NPA design, USAID/Port-au-Prince and the Haitian Government are considering privatization as a possible means toward greater public sector efficiency. HFS is helping to identify policy and regulatory barriers to the private management of public hospitals and to contracting for basic hospital services such as laundry and maintenance. In Belize, HFS researchers analyzed the licensing requirements for private medical practice and found some of the most restrictive practices in the developing world. The result of this work is that the Government of Belize is now interested in opening up the private health marketplace to more practitioners. HFS-sponsored work in Senegal has included review and analysis of the major regulatory codes and legislation affecting private health providers, and initial recommendations for improvements expected to lead to expanded private coverage while maintaining adequate quality of services.

Another example of the HFS approach to policy and regulatory issues is found in the HFS Applied Research Agenda. In this Agenda, a major applied research project is proposed to develop a greater understanding of how private sector provision and financing can be expanded. One of the key issues to be studied cross-nationally is how governments "accommodate, inhibit, and regulate private sector development." Finally, HFS contributed to the development of the "guidelines for analysis of legal and regulatory constraints on health financing" being produced by the Latin America/Caribbean Health and Nutrition Sustainability (LAC/HNS) Project.

3. Lack of development of credit markets to finance private hospitals and clinics may inhibit private growth.

In many countries, it is believed that expansion of the private sector is inhibited by the scarcity of credit for the establishment of health care providers. Private providers argue that without access to capital, it is difficult for them to fund feasibility studies, to construct, renovate, or enlarge facilities, or to cover start-up or transitional operating expenses. In several HFS countries, restricted access to capital is believed to be one of the

main barriers to group practice and the extension of services to rural areas. HFS has recommended in several countries that access to credit be explored as part of any assessment of private sector expansion, to determine the importance of this possible constraint.

HFS Approaches: In both the Philippines and Pakistan, HFS is addressing credit availability as an issue in the potential for private sector expansion. HFS researchers in the Philippines are examining the past credit experiences of private providers, and canvassing current finance entities (e.g. national banks, social security, and private banking institutions) to assess credit practices toward the health sector. In addition, HFS is collecting information on experiences from the provider perspective through interviews with hospital and clinic operators. In Pakistan, HFS researchers will undertake a similar exercise by meeting with banking/finance leaders, Ministry of Finance and Planning Commission officials, private providers, equipment importers, and leaders of the organized sector (e.g. employers). The objective is to prepare a "financial brief" on the state of the capital market in the health sector. In both of these cases, the analyses will feed into policy dialogue activities by the USAID mission.

4. The private sector lacks the managerial, administrative, and financial systems to provide managed or pre-paid health care.

Many experts and multilateral agencies believe that developing countries will eventually need to foster managed or pre-paid health care systems to cover middle- and lower-income groups. At present, these types of systems generally are not large and serve mainly upper-income groups. Expanding them to other income groups will require technical assistance in management, administration, and financial systems, until such time that an adequate skill base exists in the country involved.

The clearest example of this issue occurs in the highly visible world of HMOs. Based on success in the U.S. and a few other countries such as Brazil, the HMO model was embraced in a variety of settings around the developing world in the 1980s. Whereas pre-paid and capitation theories were partially understood in some cases, capabilities required to design and manage profitable pre-paid systems were not. One of the main deficiencies was pricing. There are two examples in Ecuador of HMOs which failed because the operators did not understand how to price their services for the risk-pool population, or to adequately estimate utilization. In the Philippines, HMOs have expanded dramatically in the past few years, but many are barely surviving because of poor financial and administrative management.

HFS Approaches: In the Dominican Republic, HFS examined the potential for grouping low-income microenterprise owners and employees into risk-sharing pools that would receive pre-paid health services from local HMOs. HFS staff worked with Dominican HMOs to develop model organizational structures that could link financing groups to providers, and priced a series of benefit packages that could be afforded by low-income beneficiaries who currently have no health care coverage. Other HFS activities in the Dominican Republic included the design of a program to assist large employers of low-income groups to provide more cost-effective health services to employees and dependents. In this case, employers do not know how to match health services to needs and are supporting on-site medical services which are inefficient and inappropriate. The Mission has incorporated the recommendations from HFS into the Family Health Project Identification Document.

HFS researchers in the Philippines are exploring problems in the development of managerial, administrative, and financial systems that inhibit the expansion of managed or pre-paid plans. The HFS report will provide recommendations for improving operating efficiency of the country's struggling HMOs.

5. Many countries lack insurance and other mechanisms for financing private services.

In comparison to many industrialized countries, developing countries have very limited experience with private health insurance. HFS has argued that, in the face of failing public health systems, private insurance financed by beneficiaries (and perhaps subsidized by the government for certain groups) is one of the feasible solutions to the growing health care crisis in a number of countries. Three of the reasons for the lack of private third-party payment systems are: 1) the existence of no-charge public services; 2) the existence of social security health systems in some countries; and 3) the lack of management and financial capabilities to set up third-party systems (see above). As governments struggle with deteriorating government health and social security systems, the first two reasons are disappearing, and demand is growing for alternative health care. For example, HFS has uncovered a large potential demand for private insurance schemes in several countries, including Belize, the Dominican Republic, Ecuador, and Haiti. Groups seeking health coverage through alternative mechanisms include employers, cooperatives, and associations.

HFS Approaches: HFS is carrying out a buy-in activity in Ecuador to assist the Mission and the Government to determine approaches to expanding private sector health care. A major component of this effort is to study the feasibility of financing mechanisms based upon organized population groupings. Millions of low-income Ecuadorians belong to cooperatives which have the basic mechanisms (e.g. monthly dues collections, accounting, etc.) for collecting and administering health insurance. HFS will study several current examples to determine whether existing private insurance experiments are replicable and under what conditions, or whether demonstration projects should be set up and evaluated in determining feasible insurance options. Similarly, HFS is working with HMOs in the Dominican Republic to study the feasibility of expanding privately-financed insurance systems to low-income microenterprise owners, employees, and their families.

In Haiti, HFS analysts are also addressing the private insurance issue by assisting a well-known local PVO to study an insurance scheme based in a large hospital. In this effort, HFS is exploring the potential for establishing insurance plans for middle- and upper-income clients which would then subsidize fee-for-service care for the lower-income groups. The methods used to conduct the feasibility study are household surveys, analysis of service costs, and estimations of profitability using a microcomputer simulation model.

6. Inadequate understanding of public-private interactions fosters inefficiency.

HFS has found that some governments are unaware of the consequences -- positive and negative -- of various public-private interactions. Some of the negative interactions consist of overlaps in financing or service delivery that create inefficiencies. In many countries, for example, physicians are allowed to practice medicine in the public and private sectors simultaneously. Since private practice is almost always more lucrative, these physicians emphasize their private practices at the expense of public services by limiting their

availability to public patients and channeling higher-income clients to their private offices or clinics. In addition, because the private physicians use government facilities to recruit and often to treat private patients, the physicians in effect receive considerable subsidies from the government to serve paying clients, and not the poor.

Just as important, numerous governments offer no-charge services to their populations. Where these services are adequate (usually the largest urban areas), they can attract clients who would otherwise pay for health care. In this manner, no-charge government services compete with private services and potentially stifle their expansion, not to mention subsidize groups of people who may not merit subsidies.

Another area where the lack of understanding of public-private interaction potentially creates inefficiencies is in the privatization of certain health services (mentioned in section 2 above). HFS has encountered various cases where government- provided services may be much more expensive than privately-provided services. In these cases, it would be more efficient for governments to contract out services. Also, in two HFS countries (C.A.R. and Belize), the governments have approved the expansion of the hospital system without having the recurrent financing to maintain the facilities. Health leaders in these countries are just beginning to think about how the private sector might be able to participate in the operation of public facilities to avoid massive increases in the overall government health budget.

HFS Approaches: HFS studied the issue of physician productivity in Belize and found that specialists were seeing only a few patients per week in the public sector while their private practices appeared to be flourishing. Public patients might wait weeks and months for an appointment, while private patients of the same specialists could obtain same-day service. The Government is now considering physician productivity as a major item on its current reform agenda (which has been shaped by a larger HFS technical assistance program).

HFS plans activities in Zaire in support of the Rural Health Zone system. This system aims at rationalizing public and private health care inputs through overall management collaboration. HFS will assist in this program by providing technical assistance for the development of management information systems, and by supporting small applied research projects to test privately-financed, pre-paid health delivery programs.

In the area of privatization, HFS assisted the Kenyatta National Hospital in Kenya to assess the feasibility of converting unused space to a set of surplus-earning private luxury physician suites. These suites will allow specialists working at the hospital to see their private patients in a convenient and comfortable location away from the other clients. The HFS study showed that a 16 million shilling investment in the private suites would reach the break-even point after eight years and be a profitable enterprise for the hospital thereafter.

In the Central African Republic, the Government is faced with the problem of opening and operating two new hospitals which have been provided by international donors. The opening of these hospitals would require significant increases in the government health budget. HFS is carrying out a feasibility study to a) understand the budgetary consequences of expanding the number of government hospitals, and b) assess alternative ownership and management schemes through which the private sector might own or operate the hospitals, thus

relieving the government of potentially onerous budget increases.

Finally, the HFS Applied Research Agenda calls for studies of the productive efficiency of public and private providers in different settings. This type of work has tremendous potential in countries where private costs are believed to be substantially lower than public costs. Sound estimates of cost differentials could spur governments to consider more efficient use of financial resources, either through privatization by contracting out (e.g. laundry), or through direct financing of services by private providers. As a part of these studies, HFS researchers will be testing the conventional wisdom that the private sector is more efficient than the public, and assessing the feasibility of financing reforms from political and equity perspectives.

FUTURE DIRECTIONS

The above HFS assessment of its "public-private collaboration" experiences and current approaches reveals a considerable need to generate more information about and analysis of private health care delivery and financing systems. In the next year, HFS will continue the development of this information and analysis in order to: 1) test assumptions about the potential role of the private sector; 2) assist missions to design effective health projects and programs; and 3) help host-country governments to incorporate the private sector into their overall strategies to improve health care.

Through its multiple activities in the 11 countries mentioned, HFS will develop fuller perspectives on the demand, supply, structure, and organization of the private sector through a series of technical reports, applied research projects, and technical assistance experiences.

On the demand side, for example, HFS will accumulate information to obtain a better understanding of what determinants of consumer demand for private services are important and how they can be affected by government interventions (e.g. Haiti, Belize, Peru). This analysis will have two major advantages for missions' and governments' health financing work. First, it will guide policy analysts in identifying the key constraints to expanded private demand for health services. Second, it will help analysts to ascertain what demand constraints are binding and which can be manipulated by policy reform. This information can be analyzed along with information from cross-national data (see "policy development" section of AR Agenda) to assess the relative impact of different determinants known to affect demand for private health care.

On the supply side, HFS has already received buy-ins to study the relationships between the provision of private health services and such influences as taxes, import regulations, medical practice policies, and prices of competing government-provided health services (Dominican Republic, Ecuador, Egypt, Pakistan, Philippines). The results of these and other similar activities at the end of three years will provide important guidance to policymakers and donors in future efforts to expand the supply of health financing and services.

In the structure and organization of private provision and financing of health care, HFS, through its applied research agenda, will develop information on how financial and medical systems are organized across countries and how this organization affects public-private collaboration.

Importantly, the generation of information and objective analyses about

health financing will have a major impact on the *politics* of the health sector. In most developing countries, discussions and debates by local leadership about health sector financing, particularly the private sector, are based on belief and conventional wisdom. Policy dialogue based on beliefs rather than facts is not likely to result in positive change. HFS's intention is that the information and analyses it produces be a catalyst in overcoming political inertia for health financing reform.

From a broader perspective, HFS work in the public-private technical area is unique among donors and many governments in that HFS is able to work with both the public and private sectors. In countries where HFS works intensively and comprehensively (e.g. Belize, C.A.R., Ecuador, and Senegal), this means that health financing reform can take place with an understanding of the larger picture. Simultaneous work in both sectors will ensure that policy reforms and innovations are consistent and aimed at achieving larger health sector objectives. An example of this is the interaction between charging fees in the public sector and the capacity of the private sector to absorb new clients. HFS has found that for governments wanting to use fees in public facilities to better target utilization, the existence of affordable and quality private alternatives to public services is necessary.

HFS will work to better understand the relationship between what consumers of health services know and believe about improvements in the quality of care and their respective health care decisions.

A related issue is how to provide consumers with information about the technical quality of health services among competing providers. Such information would allow consumers to make informed choices. HFS intends to monitor to what extent consumers are willing to pay for higher-quality services provided by the private sector, and how they view and evaluate the various indicators of quality.

HFS believes that in the majority of cases, regulations and laws that impact on health care financing tend to discourage the private sector from playing a significant role in the delivery and financing of health care. Consequently, policy analyses and dialogue tend to identify the legal and regulatory constraints that inhibit the private sector. However, laws and regulations are necessary and appropriate to control and decrease the possibility of abuse by the private sector and to protect patients. HFS may help governments to devise laws to maintain the public good while minimally constraining the freedoms of the private sector.

RESOURCE ALLOCATION, USE, AND MANAGEMENT

by

Ricardo Bitran
and
Stephen Heinig

INTRODUCTION

Purpose and Organization of Paper

This paper presents HFS's advice and activities in HFS-assisted countries in the area of resource allocation for health. The report is organized as follows. Section II is a discussion of the rationale used by HFS when selecting interventions and making recommendations to USAIDs and country decision makers. Section III describes issues encountered by HFS in the field, approaches taken, and advice given to HFS's clients. Section IV provides a conceptual discussion about the problem of resource allocation in the health sector, outlines strategies for technical assistance, and identifies areas for research. The remainder of this section defines the resource allocation problem.

The Resource Allocation Problem and the Role of Government

Government involvement in economic activities responds to a fundamental concern for efficiency and equity. It is presumed that if markets are perfectly competitive, market forces lead economic agents to allocate resources efficiently. In perfect markets, government intervention is therefore not necessary for efficiency. Most markets--particularly those for health services--are imperfect, however. Market imperfections are due to various forms of market failures, including imperfect consumer information, incomplete markets, failure of competition, economies of scale in production, the presence of spill-over effects (i.e., externalities), and public goods. Market failures lead to inefficient patterns of resource allocation. In the presence of market failures, governments intervene in order to make resource allocation more efficient.

Examples of imperfections in markets for health services in developing countries include: poor consumer information about the benefits of preventive health care; incomplete markets for risk sharing (e.g., health insurance and pre-payment); economies of scale for certain secondary and tertiary inpatient procedures, particularly surgery and diagnostic; externalities in the consumption of immunizations against communicable diseases; and public health interventions such as vector control and certain forms of health education that are public goods.⁶

Even if markets are perfectly competitive (and thus efficient), however, the resulting pattern of resource allocation is not necessarily equitable. Government intervention in the economy is also aimed at correcting inequities in the way resources are allocated.

Government interventions can take various forms. Governments can influence consumer and producer behavior by providing information. Governments can tax

⁶ For a discussion of market failures in the market for hospital care in developing countries see Barnum, H, and J. Kutzin, 1990.

individuals and activities, and can produce legislation and regulations to govern economic activities. Governments can subsidize the prices of certain goods or services, or can directly finance production. Finally, governments can engage directly in production of goods and services.

Leaving equity considerations aside for the moment, the question of resource allocation to economic sectors entails two main problems: achieving external efficiency and achieving internal efficiency. The first problem involves determining how resources should be allocated among sectors (e.g., health, agriculture, education). A solution to this problem requires knowledge about each sector's social rate of return⁷, that is, the relationship between the sector's contribution to the country's overall development goals (e.g., maximization of per capita income) and the social cost of sectoral activities.

The second problem, achieving internal efficiency, involves the issue of how resources should be allocated within each sector. A solution to the second problem requires knowledge about: the alternative interventions available within the sector (e.g., immunizing children, promoting safe sex, and providing emergency hospital care), each intervention's cost structure, and each intervention's contribution to sectoral goals (in the health sector, the goal can broadly be stated as maximization of health status of the population).

Equity considerations introduce a third dimension to the problem. Governments must not only worry about the efficiency of resource use, but must also be concerned with economic, physical, and other dimensions of consumer accessibility to constant-quality health goods and services. Accessibility--and thus equity--vary with consumer characteristics such as income, education, and location. Accessibility is also affected by supply-side factors such as location of facilities, schedule, quality, and prices of services offered. In pursuing an equitable allocation of resources, governments can look for ways to influence demand and supply through policy interventions.⁸

In sum, the problem of resource allocation involves questions pertaining to external efficiency, internal efficiency, and equity. The problem concerns, of course, both the government and the non-governmental sector, including the consumers. This paper focuses on the actions that governments can take to influence government and private sector resource allocation for health.

It is important to point out that the problem of allocating resources for health encompasses all activities that affect individual health, not just health care. Health status is influenced by a multitude of variables, including nutrition, education, lifestyle, demographic traits, consumption of preventive and curative health care, and environmental factors. A broad view of the problem must therefore consider how the government and private providers (i.e., the supply side of the market) allocate their resources for the production of all types of health inputs and how households (i.e., the demand side of the market) allocate their resources for the consumption of health inputs in order to produce health. Because of HFS's mandate, this paper takes a narrower view of the problem by focusing on resource allocation issues as they pertain to health care services.

⁷ More about this in Section IV.

⁸ For a clear and useful definition of the concept of equity in health care, see Musgrove, Philip, 1986.

The next section provides a conceptual framework for the analysis of the resource allocation problem in the market for health care services.

RATIONALE

The HFS Project mandate calls for activities to be undertaken under five broad technical areas, namely, (1) social financing of the demand for health care; (2) public-private collaboration; (3) cost recovery; (4) resource allocation, use, and management; and (5) costing.

Although the above list suggests that issues of resource allocation fall within only one area (area 4), in reality the problem of allocating resources encompasses all five areas, as is illustrated next.

The main objective of promoting social financing arrangements, such as health insurance and pre-payment, is to provide individuals with mechanisms for reducing the financial risk posed by uncertain, catastrophic health events. Making risk-sharing available, however, has significant consequences. In particular, it is argued that an important impediment to involvement of the private sector in the provision of hospital care in developing countries is the lack of health insurance and related mechanisms to make private financing of inpatient services possible.⁹ With risk-sharing financing mechanisms in place, a key obstacle to private provision of services would be lifted. This could partially relieve the government from the burden of financing expensive inpatient services, thereby freeing public resources that could be reallocated for other purposes, including health activities. Risk-sharing mechanisms can also help increase the amount of financial resources available for health care. Also, health insurance modifies consumer incentives by changing out-of-pocket costs of care, and thus can affect demand, in terms of both the types and quantity of health care services demanded. Access to health insurance means that individuals and households who are subscribers no longer have to be concerned about saving for unanticipated, expensive health events. Their savings, above the value of health insurance premiums or prepayments, can thus be reallocated to other uses.

The problem of resource allocation is not only limited to government actions but, as already stated, also encompasses private sector activities and their allocative implications. While the government can directly control how it allocates its own resources, it can also influence, through a menu of policy actions, how the private sector allocates resources for health. For example, by lifting legal impediments to private sector participation in the financing and provision of services--impediments that are common in many developing countries--the government can promote private engagement in health activities, thereby increasing overall availability of resources for health. Through taxation and subsidization, governments can modify consumer behavior. For instance, cigarette and alcohol taxes discourage consumption of these items, while subsidization of preventive services promotes demand for prevention.

Cost recovery systems constitute another set of policies and actions that have important allocative consequences. Cost recovery in public facilities can increase the amount of resources available for public provision of health care, whether cost recovery proceeds are retained and spent locally at the facility level, or forwarded to the central or local governments to be spent on other health activities. Cost recovery in government facilities can affect how

⁹ Charles C. Griffin, July 1989.

households allocate their resources for health between the private and public sectors. Cost recovery policies can also affect the quantity and composition of health care services consumed by individuals. Finally, cost recovery can result in increased overall spending on health by all parties.

Costing constitutes a set of technical tools aimed at estimating the level of resources required for producing various services at different levels of output. Costing is an essential technique for assessing issues of resource allocation, for it allows technicians and policymakers to measure the effectiveness and efficiency with which resources are utilized, and thus to choose alternative ways for allocating resources. Costing can be used to anticipate resource needs, which in turn can be used to determine financing strategies.

In sum, the above discussion illustrates how all five technical areas of concern for HFS include issues of resource allocation. From the discussion in Section I, activities and policy actions in the health sector can be classified into the following three categories:

- Actions that affect the overall amount of resources available for health (external efficiency).
- Actions that influence the efficiency with which resources devoted to health are utilized (internal efficiency).
- Actions that affect the equity with which resources devoted to health are allocated among population groups.

Exhibit 1 illustrates the types of activities or policy actions that can be undertaken under the above three categories of interventions. Through technical assistance (TA) and applied research (AR), HFS has conducted work in those three areas. It is clear from the table that resource allocation issues cut across all five technical areas of the HFS Project.

The following section describes selected HFS activities undertaken during the project's first two years of operations, which are intended to promote more equitable and efficient resource allocations for health.

Exhibit 1 **Examples of Activities Aimed at Affecting** **Resource Availability for Health and Improving** **the Equity and Efficiency of Resource Use**

<u>Activities aimed at increasing resource availability for health</u>	<u>Activities aimed at improving the efficiency of use of health resources</u>	<u>Activities aimed at improving equity in resource allocation</u>
Promoting greater governmental allocations for health activities away from other non-health sectors and activities	Conducting studies of cost in order to determine resource needs by various activities	Conducting studies of the demand for health care, with a focus on differences in demand across population groups
Levying taxes that are earmarked for health activities	Conducting studies of cost effectiveness to prioritize health interventions	Exploring and implementing mechanisms for means testing and price discrimination based on income or other factors
Borrowing (internally or externally) by the government in order to pay for health activities	Conducting cost-benefit studies to evaluate the economic returns of various activities	Developing models of consumer behavior or more general market models to anticipate the likely effects of various policy interventions on demand by different population groups and thus on equity
Adopting cost recovery for health care in government health facilities	Conducting studies of cost, controlling for quality and other factors, to compare efficiency across various providers (e.g., private and public)	Providing government vouchers to low-income groups so that they may use private providers at low or no out-of-pocket cost
Promoting the creation of risk-sharing mechanisms	Adopting user-fee systems which seek to improve efficiency in consumption (e.g., setting fees in order to discourage self-referrals and spurious consumption of certain services)	
Lifting legal barriers for private sector involvement in health care financing and delivery	Modifying personnel incentives in government health services to promote more efficient behavior	
Promoting private sector initiatives in health care financing and delivery by providing subsidized credit or other measures	Setting up country-wide, regional, or local information systems in order to assess and monitor health expenditure patterns by the government and the private sector	
	Setting up facility-based management and financial information systems to improve control and efficiency in resource use	

ISSUES ENCOUNTERED BY HFS, ACTIONS UNDERTAKEN, AND ADVICE GIVEN

This section provides an account of selected resource allocation issues encountered by HFS in the field and describes project actions and advice given. The account is organized by category of intervention, using the three categories identified in the previous section. Categorizing activities in this manner is somewhat arbitrary since many activities have multiple efficiency and equity implications. For the most part, however, the classification proves useful in organizing the discussion.

Information about HFS activities was gathered through a review of all HFS consultant and staff trip reports as well as a review of the project's technical reports and notes. Interviews of HFS staff were used as a complementary source of information.

Interventions That Affect the Overall Amount of Resources Available for Health

Kenya Ministry of Health Preventive and Primary Health Care Resource Gap Study¹⁰

Supply side constraints in the market for preventive and primary health care services are viewed by many as a major impediment to achieving higher levels of consumption of those services. In order to assess the resources needed to expand the government supply of preventive and primary care, USAID/Nairobi asked HFS to estimate the additional public resources necessary to provide preventive and primary health care at full capacity in existing MOH facilities. The study defined full capacity as the maximum and most efficient allocation of resources that could be achieved within the constraint imposed by the physical space of existing facilities. Five percent of all MOH primary and preventive care facilities were sampled to estimate current levels of resource use and to project resource needs at full capacity. Current labor expenditures were found to be two-thirds of total current expenditures. The estimated resource gap for labor was in absolute terms greater than for non-labor, but in percentage terms, it represented 22 percent of current labor expenditures. In contrast, the resource gap for non-labor inputs was 67 percent, meaning that current non-staff expenditures needed to increase 67 percent to achieve full capacity. A plan was drawn up by which the MOH would bridge the estimated gap in a four-year period. According to the plan, use of additional resources would be prioritized in time in order to spend them first on most immediate needs, such as transport. Overall, the resource gap was estimated at KSh. 430 million (KSh. 23 = 1 US\$), or 21 percent of current MOH recurrent expenditures per year.

The request from USAID/Nairobi limited the analysis to the supply side. Resource limitations precluded analysis of an important dimension of the problem, namely, consumer demand. Preventive and primary health care utilization levels are the result of supply and demand interactions. The study focused only on a strategy for easing supply constraints by expanding government capacity for service provision, but did not assess the effort required to promote demand, particularly for preventive services, to make full use of the expanded capacity. Such an assessment should be conducted prior to adopting measures for expanding capacity.

Cost Recovery for Health Project in Egypt

USAID/Cairo is using HFS assistance to develop a project for the conversion of 40 hospitals and 10 polyclinics, which currently operate under the direction and financing of the MOH, into para-statal entities. The cost recovery facilities will be allowed to adopt cost recovery for their services, and to retain the generated revenue so that it may be spent at the facility level, as determined by each facility's management. Project facilities will also be allowed to hire and fire personnel and to determine salaries. The adoption of cost recovery and the increased autonomy of the CRH facilities are expected to result in greater revenue and higher quality in those settings. HFS has advised the MOH's project directorate that important resource allocation issues still need to be resolved, however. In particular, it is important to establish the government subsidization policy toward the CRH facilities.¹¹ If the government

¹⁰ Forgy, Larry 1991.

¹¹ For a detailed discussion of this and related issues see: Stevens, C., 1991.

reduced its subsidies to the CRHs in an amount equal to the cost recovery proceeds, the facilities would have little incentive to enforce cost recovery. From the viewpoint of the MOH, however, a cut in subsidies could be desirable if that would allow it to reallocate its monies to other health activities, possibly away from inpatient urban care. On the other hand, the MOH could also see its budget reduced, as the Ministry of Finance realizes that more resources for health are now being generated directly from users.

Cost Recovery in Belize¹²

The current user fee system administered in Belize's MOH facilities collects only two percent of the MOH's total costs. Higher levels of cost recovery are expected to enhance resource availability in public facilities, making quality improvements and higher volumes of service delivery possible. A team of HFS staff examined the causes behind the failure of the Belize user fee system to achieve more than nominal cost recovery, and recommended changes in both policy and implementation strategies. Factors contributing to the low level of cost recovery were found to include low prices (the existing price schedule was set in 1967), ineffective means testing and exemptions, and lax billing and collection. HFS recommended the development of a new price structure, decentralization of management, and transfer of the responsibility for means testing from the MOH to the Social Development Department. HFS recommended that the changes be implemented via a demonstration project, possibly at Belize City Hospital, the country's largest medical facility.

Central African Republic¹³

As part of an assessment visit and in preparation for sectoral work, HFS staff analyzed the pattern of health expenditures by the Ministry of Public Health and Social Affairs (MSPAS). Total government expenditures declined from 35 billion FCFA in 1984 to about 28 billion FCFA in 1990. During that same period, however, MSPAS expenditures remained virtually constant in nominal terms and increased as a percentage of total government expenditures from seven to 10.4 percent. This percentage increase in the share of total public outlays for health activities may reflect the importance attributed to health activities by the government of the CAR. Nevertheless, annual inflation of about eight percent and population growth of 2.6 percent meant that, in 1990, real per capita government health expenditure was approximately 54 percent its 1984 level.

Non-Project Assistance (NPA) in Haiti¹⁴

In recent years, A.I.D. has been supporting NPA activities as an alternative to the traditional form of project support used by the agency. Under an NPA grant, the host government is expected to meet previously established benchmarks. Grant transfers, or tranches, are made by USAID to the government as the benchmarks, or conditions precedent (CPs), are met. Private voluntary organizations (PVOs) provide the bulk of preventive and primary health care in rural Haiti. In light of this, an HFS staff member helped USAID/Port-au-Prince

¹² La Forgia, G. and C. Griffin, 1991.

¹³ Setzer, J. and M. Weaver, Assessment Report, 1991; and Setzer, Trip Report for CAR, 1991.

¹⁴ Setzer, J., Haiti Trip Report, 1991.

develop ideas for an upcoming NPA project whose main purpose is to promote public-private collaboration in service financing and delivery. The policy reform package to be carried out under NPA is expected to increase the level of resources devoted to health in Haiti and improve the efficiency and equity of resource allocation and use. PVOs such as the Centre pour le développement et la santé (CDS) currently operate MOH facilities in both urban and rural areas. The policy reform measures that HFS recommended be included in the NPA policy component are aimed at formalizing and capitalizing upon the relationship between the MOH and PVOs. This includes formalizing government subsidy policies for PVO activities and programmatic obligations. HFS suggested that the NPA also include measures to decentralize government services, including the possibility of converting MOH hospitals, such as the University Hospital, into para-statal, as was done in Kenya's Kenyatta National Hospital.

Social Security Funding of Health Care in Belize¹⁵

As part of its comprehensive review of health care financing in Belize, HFS analyzed the issue of Social Security Board (SSB) financing of health care. Approximately 60 percent of Belize's work force is affiliated with the SSB. The SSB provides for retirement benefits but currently limits its health care benefits to interventions dealing with work-related accidents. No health care benefits are provided to the dependents of SSB affiliates. The SSB does not own or operate its own health facilities. SSB affiliates in need of health care for work-related problems make use of MOH services and the SSB makes a block contribution to the MOH. This contribution is currently only about \$25,000 annually. In recent years, the SSB fund has been generating a surplus. Government officials increasingly view the SSB as a potential source of financing for health care. Use of SSB funds for that purpose could greatly expand resource availability for health in Belize. Recommendations for additional transfers of SSB surplus funds to the MOH had been made prior to HFS involvement in the issue. HFS recommended against a supplemental transfer of funds from the SSB to the MOH. Instead, in the short term, HFS advised that the SSB work with the MOH to establish a mechanism by which the SSB can reimburse the MOH for the care provided for work-related problems to SSB affiliates. The development of cost-accounting systems was recommended as part of the effort to establish a reimbursement mechanism. In the medium term, HFS recommended that a portion of the SSB surplus be used in the form of grants to promote quality improvements and the successful implementation of cost recovery among individual MOH facilities. In the longer term, HFS recommended that the SSB could be considered, among other options, as part of a national health insurance system, especially involving logistical and administrative systems.

Interventions that Influence the Efficiency in Utilization of Resources Devoted to Health

Development of Financial Management Information Systems and Accounting Manuals for Egypt Cost Recovery for Health Project (CRHP)¹⁶

As part of the CRHP Project described earlier in this paper, HFS reviewed information and accounting systems currently in use at the MOH in order to develop Uniform Financial Accounting Practices to be used by the CRHP facilities.

¹⁵ La Forgia, G., Volume III, 1991.

¹⁶ Hildebrand, S., Egypt Trip Report, 1991.

HFS also helped develop a generic business plan for CRHP facilities to improve planning, marketing, management, financial practices, and quality of services.

Senegal Study of Health Facility Costs and Efficiency¹⁷

To aid in budgeting and strategic financial planning, HFS assisted USAID/Dakar in the design of a study to determine the costs in a sample of MOH facilities. The study, to be carried out by HFS, will also measure and compare efficiency across MOH facilities of different levels of care. The study may also be extended to measure and compare efficiency between public and private providers. For that purpose, HFS has proposed to USAID/Dakar that a sub-sample of private providers be included in the study sample. Information about provider efficiency will be useful in designing policies for promoting efficiency in public facilities as well as policies dealing with private sector involvement in service delivery.

Study of Hospital Efficiency in Ecuador

In Ecuador, there are currently five different types of providers of inpatient care. These are: the private sector, the Ministry of Public Health, the Military, the Junta de Beneficencia, and the Social Security Administration. In order to assess the relative performance of these different providers, USAID/Quito, in consultation with HFS staff, has requested that HFS conduct a comparative study of hospital costs and efficiency. Study findings will feed into the policy process in a fashion similar to the case of Senegal, described in the preceding paragraph.

Non-Project Assistance (NPA) in Cameroon

The NPA initiative in Cameroon was to be aimed at improving the efficiency of MOH operations in preventive and primary health care (P/PHC). An HFS staff member assisted USAID/Yaoundé in the development of an NPA program as part of broader health sector assistance design for promoting government policy development and implementation of strategies for P/PHC. USAID/Yaoundé decided to omit the NPA component in the final design. HFS recommended that fee retention at MOH facilities, integration of PHC activities (including family planning), decentralization of management, and community participation in management should all be part of the NPA conditions for policy reform. Although the legal framework for charging fees for curative care already exists in Cameroon, actual implementation of fees has been limited primarily to donor-supported projects.

Feasibility Study for the Renovation of a Private Wing at Kenyatta National Hospital (KNH), Kenya¹⁸

KNH, Kenya's largest hospital, formerly was operated by the MOH, but has recently become a para-statal entity. One problem facing KNH is the lack of control over the way its staff physicians distribute their time between KNH work and their private practices. In order to influence the whereabouts of its physicians, KNH commissioned HFS to conduct a feasibility study of renovating a wing of the hospital for the private use of its physicians. The study determined

¹⁷ Makinen, M., and B. Barker, 1990.

¹⁸ Hildebrand, S., Kenya Trip Report, 1991.

a break-even rental fee to be paid by the physicians to KNH in exchange for the use of KNH's space and services by the physicians' private patients. KNH feels that by offering an in-house setting where its physicians can run their private practices, KNH will be able to benefit from greater physician availability, thus improving efficiency in the hospital's medical activities.

Staffing and Utilization of Ministry of Health Facilities in Belize¹⁹

HFS conducted an evaluation of the efficiency and equity implications of the location and staffing of MOH facilities. HFS staff reviewed a sample of health facility records to assess the productivity of the medical personnel in various locations. Wide variations in productivity were found. These variations could be due to local differences in demand for MOH physician services, as well as to non-physician supply constraints. Resource limitations precluded a more rigorous analysis. Interviews of facility personnel suggested that a shortage of nurses in Belize was an important constraint to the more efficient use of physician time. The study findings did not support the MOH thesis that Belize has a shortage of specialty and general physicians. The HFS team recommended that the government implement better systems for monitoring the use of physician time before changing current personnel allocation patterns. At the same time, the team recommended that a working group examine ways to increase the supply of nurses.

A study of facility use found that the six MOH hospitals located outside of Belize city had an average occupancy rate below 35 percent, while the maximum occupancy rate observed was 42 percent. Belize City Hospital (BCH), in contrast, had an occupancy rate of over 75 percent. Use of ambulatory services was high in all facilities. The study concluded that the district hospitals had an over-supply of low-level, non-specialty inpatient services, revealing an inefficiency in the current system. In contrast, the public sector supply of high-level hospital care was found to be insufficient to meet demand (given current near-zero prices). The study also found that a high percentage of all district outpatients were referred to BCH, apparently due to a shortage of specialty physicians outside of BCH. In order to reduce private referral costs and promote greater and more efficient access to specialty care, the study recommended that specialty physicians rotate among MOH facilities.

Financial Information Systems for Family Health Services (FHS) Project Paper²⁰

The inadequacy of existing financial and management information systems (FMIS) was identified as a chief impediment to achieving greater efficiency in resource use at government PHC facilities in Jordan. An HFS staff member described and identified data requirements for a primary health care FMIS to be developed by the MOH in the context of USAID/Amman's upcoming FHS Project. An analysis of the MOH health delivery system was performed, identifying decision-making areas and information needs.

¹⁹ Levine, R., and G. La Forgia, 1991.

²⁰ Hildebrand, S., Jordan Trip Report, 1990.

Pharmaceutical and Medical Supplies System Assessment at Kenya's Ministry of Health²¹

Kenya's MOH was concerned that frequent shortages of essential drugs and medical supplies at government health institutions would undermine efforts to improve the effectiveness and efficiency of these institutions as a system of user charges was instituted. At the request of the MOH, USAID asked HFS to assess the pharmaceutical and medical supply system. A comprehensive review of the system was performed and actions for correcting problems were recommended.

Interventions that Affect Equity in Allocation of Resources Devoted to Health Among Population Groups

Cost Recovery in Belize²²

The cost recovery study alluded to earlier in this document examined the equity implications of the current low fee system at MOH facilities in Belize. A chief inequity of the present system is its implicit subsidization of private medicine by the public sector. Specialists at BCH are permitted to admit private patients and charge a fee usually comparable to that of the private sector. Although MOH hospitals have higher fees for private patients, privately admitted patients seldom reveal that they are private, to avoid paying higher fees. Physicians have no incentive to report their private patients because they are legally responsible to see that these patients pay all charges. The study also revealed that subsidies that go to large urban hospitals tend to favor urban residents who are more familiar with the types of rules and loopholes in the system. Also, rural residents are much less likely to benefit from subsidized urban care, given their much higher travel costs. Study recommendations on cost recovery at MOH facilities (see recommendations above) were aimed at correcting the inequities of the current low fee system.

Central African Republic²³

An analysis of 1988 budget data revealed that about three-fourths of all MSPAS physicians practiced in the country's capital, Bangui, where only 18 percent of the population lives. HFS recommended that an analysis of physician deployment be performed by the MSPAS to examine the equity implications of the current allocation, as well as to explore potential gains in equity by reallocating physicians.

Risk-Sharing Through Igualas Medicas in the Dominican Republic²⁴

Igualas are HMO-like organizations that have developed over the past two decades in the D.R. The Igualas have been successful in enrolling middle- to upper-income families through individual contracts or employer-based arrangements. In an effort to explore the feasibility of expanding Iguala

²¹ Quick, J.D. and F. Ndemo, 1990.

²² La Forgia, G. and C. Griffin, 1991.

²³ Setzer, J. and M. Weaver, Assessment Report; and Setzer, J., CAR Trip Report, 1991.

²⁴ La Forgia, G.M., HFS Technical Report No.2, 1990.

services to lower-income employees and their dependents, USAID/Santo Domingo requested technical assistance from HFS. Interest in expanding private risk-sharing opportunities to the lower-income sector is in part stimulated by the results of previous research on health care utilization and demand in the D.R.²⁵ This research showed that, despite free universal provision of care at MOH facilities and free services for beneficiaries at Social Security (IDSS) facilities, a large percentage of both the uninsured population and the IDSS beneficiaries chose private, for-fee health care services. This choice was explained in part by the perceptions of poor quality of MOH and IDSS services by the population. HFS established contacts with two lending associations that provide loans to informal sector microenterprises and that are interested in facilitating health coverage to their members. The HFS analysis concluded that USAID could facilitate a match between the lending organizations and Igualas Medicas to cover up to 100,000 people in Santo Domingo. Providing private sector risk-sharing coverage to lower-income populations in Santo Domingo would greatly enhance equity in the capital city by lifting the impediment that high out-of-pocket private fees now have on access to higher-quality private care by the poor.

FUTURE DIRECTIONS

The requests for HFS assistance summarized in this paper illustrate that the resource allocation problem goes well beyond the question of how governments should allocate their own financial resources for the financing and provision of health services. The problem encompasses resource allocation behavior by all agents in the market, including government services, private providers, consumers, and donors. From a policy standpoint, the problem of resource allocation for health consists of determining the policies and actions that governments can undertake to promote efficient and equitable behavior of agents in health markets.

Through technical assistance, HFS has helped USAIDs and host-country decision makers to formulate policy and undertake actions conducive to more efficient and equitable behavior. HFS activities have dealt primarily with the adoption of cost recovery in government health facilities, the involvement of the private sector in the provision and financing of health services, the establishment of risk-sharing mechanisms, and the promotion of studies and measures aimed at increasing the efficiency of resource use in government health services.

Despite the broadness of the resource allocation problem in the health sector, much of the focus of sectoral analysts and government policymakers has been on the question of how governments could more optimally allocate their existing resources for health, overlooking the ability that governments have to influence the behavior of private agents through policy. While allocative strategies and policy statements abound, there is a notorious lack of analytical work and research to support current policy statements and actions.

The remainder of this discussion focuses on the question of how governments should allocate existing public resources for health and outlines areas for research by HFS. Other important aspects of the resource allocation problem have been raised throughout this paper but are not addressed here. Research in those areas is also badly needed. In particular, research is needed to determine the

²⁵ See, for example, Gomez, L.C., 1988; and Bitran, R., 1989.

economic returns on investments in health, and to compare such returns with those on investments in other activities.²⁶ Information about the social returns of human resource development activities would permit more rational allocation of government funds to the social sectors (the external efficiency problem).

The Problem of Allocating Government Health Resources to Health Activities

Much has been said about the apparent efficiency and equity implications of current government budget allocations for health. The discussion typically has centered around investment options which seemingly involve trade-offs (e.g., curative versus preventive care; hospital versus ambulatory care; primary versus secondary and tertiary care; rural versus urban care) and the criteria for striking an allocative balance among these options. As pointed out by Heller:²⁷

Studies of the health sector in developing countries (LDC's) commonly conclude that there is considerable inefficiency and inequity in the allocation of health resources. Focusing primarily on aggregative measures, a significant imbalance invariably is determined in the level of expenditure and medical resources available per capita, interregionally and between the urban and rural areas. It is argued that an "excessive" level of expenditure is devoted to specialized urban hospitals rather than to primary health care institutions for the mass of the populations. Policy conclusions are immediately drawn that more equitable and efficient programs require a more decentralized allocation of resources" (p. 1)

Heller warns that the efficiency and equity implications of current government allocations must be examined with caution:

...at a theoretical level, there may exist a sound basis for many of these putative "imbalances." In fact, the "optimal" medical care system may, on the surface, display many of these characteristics, while being both efficient and equitable. Consequently, a policy analysis of an LDC health system requires both a description of the pattern of resource allocation and an analysis of how the system operates. Only in this way can one know whether the surface "imbalances" are offset by the operating efficiency of the overall system." (p.1)

Heller²⁸ and Barlow²⁹ have developed analytical models for determining how health resources should be allocated. Fendall³⁰ also provides a conceptual framework for decisions on resource allocation. More recent work by Jamison and

²⁶ For an interesting econometric study of the returns to health and education in a sample of developing countries, see Wheeler, D., 1980.

²⁷ Heller, P., Discussion Paper No. 67, 1977.

²⁸ Heller, P., 1975; Heller, P. 1978; and Heller, P. 1977.

²⁹ Barlow, R., 1976.

³⁰ Fendall, N.R.E., 1972.

Mosley³¹, provides invaluable empirical evidence on the cost-effectiveness of disease control interventions, information which is essential for making efficient allocations of resources in health. This literature should be reviewed as the first step of a research project on how governments now allocate resources for health and how they should optimally allocate such resources.³² Specific questions to be addressed under that research include the following:

(1) How do governments now allocate health resources among programs and regions?

Analysis of current patterns of government health spending is impeded by lack of information. Governments in developing countries often categorize health expenditures according to input categories such as personnel, maintenance, and utilities. Expenditures are seldom classified systematically by program or activity. A first step in the research program then would consist of identifying countries where meaningful data on resource use can be obtained. A side product of this effort would be the development of information systems for government health spending which would permit useful policy analysis (i.e., a system where resource use is associated with health outputs and, where possible, with health outcomes).

(2) On what basis do governments now decide how to allocate resources devoted to health among various programs and regions?

While many experts and policymakers agree that health spending patterns are sub-optimal in some countries, few have attempted to understand and document the decision-making process which leads to current allocations. Most developing countries continue to spend a large proportion of their health budgets on large secondary and tertiary urban hospitals while devoting very little to other forms of care. To what extent is this behavior inefficient and inequitable? What is the objective function of governments which leads them to make such decisions? What is the nature of the process whereby allocative decisions are made?

(3) What is an optimal configuration of resource allocation?

An answer to this question requires knowledge about the cost-effectiveness of alternative health interventions, such as the information generated by the Jamison and Mosley (forthcoming) research. But knowledge of social health goals is also necessary. For example, do societies assign different weights to the well-being of their members according to economic or other criteria? As Heller (1977) points out in his paper:

A growth-oriented society may ascribe significant weight to achieving relatively optimal treatment of diseases afflicting high-productivity individuals or may provide different qualities of care to individuals with different productivity levels. (p.124)

³¹ Jamison, D.T. and W.H. Mosley, 1991; and Jamison, D.T. and W.H. Mosley (eds., forthcoming).

³² This is the central theme of one of HFS's major applied research topics called "Reallocating Public Sector Spending".

Health investment strategies should not be based purely on cost-effectiveness criteria, but should also take into account society's values.

Additional research questions include: What steps could governments take in order to move from currently sub-optimal allocations toward more optimal allocations? How can donors help governments promote greater efficiency and equity in the allocation of public spending for health? Over the next few years, HFS will pay increasing attention to these issues, through both applied research work and technical assistance.

REFERENCES

- Barlow, R., "Applications of a Health Planning Model in Morocco," *International Journal of Health Services*, Volume 6, No. 1, 1976.
- Barnum, H, and J. Kutzin, "Public Hospitals in Developing Countries: Resource Use, Costs and Financing", Population, Health and Nutrition Division, Population and Human Resources Department, The World Bank, September 1990.
- Bitran, R., "Household Demand for Medical Care in Santo Domingo, Dominican Republic", HCF/LAC Research Report No. 9, SUNY/Stony Brook, NY: HCF/LAC, 1989.
- Fendall, N.R.E., "Primary Medical Care in Developing Countries," *International Journal of Health Services*, Volume 2, Number 2, 1972.
- Forgy, Larry, "Kenya Ministry of Health Preventive and Primary Health Care Resource Gap Study." HFS Technical Report No.1, HFS Project, Bethesda, MD: 1991.
- Gomez, L.C., "Household Survey of Health Services Consumption in Santo Domingo, Dominican Republic: Methodology and Preliminary Findings", HCF/LAC Research Report No. 8, SUNY/Stony Brook, NY: HCF/LAC, 1988.
- Griffin, Charles C., "Strengthening Health Services in Developing Countries through the Private Sector", International Finance Corporation, Discussion Paper Number 4, The World Bank, Washington, D.C.: July 1989.
- Heller, P., "An Analysis of the Structure, Equity and Effectiveness of Public Sector Health Systems in Developing Countries: The Case of Tunisia, 1960-1972," Center of Research in Economic Development, Discussion Paper No. 43, The University of Michigan, Ann Arbor, MI: 1975
- Heller, P., "Issues in the Allocation of Resources in the Health Sector of Developing Countries," Center for Research in Economic Development, Discussion Paper No. 67, The University of Michigan, February 1977.
- Heller, P., "Issues in the Allocation of Resources in the Medical Sector of Developing Countries: The Tunisian Case", *Economic Development and Cultural Change*, 1978;
- Hildebrand, S., "Trip Report for Egypt," HFS Project, Bethesda, MD: 1991.
- Hildebrand, S., "Trip Report for Jordan," HFS Project, Bethesda, MD: 1990.
- Hildebrand, S., "Trip Report for Kenya," HFS Project, Bethesda, MD: 1991.
- Jamison, D.T. and W.H. Mosley, "Disease Control Priorities in Developing Countries: Health Policy Responses to Epidemiological Change," *American Journal of Public Health*, Vol. 81, No. 1, January 1991
- Jamison, D.T. and W.H. Mosley (eds., forthcoming) "Disease Control Priorities in Developing Countries," New York: Oxford University Press for the World Bank.

- La Forgia, G, "Health Financing and Management in Belize: An Assessment for Policymakers. A Compendium of Technical Notes. Volume III: Social Security," HFS Project, Bethesda, MD: 1991.
- La Forgia, G., "Health Services for Low-Income Families: Extending Coverage Through Prepayment Plans in the Dominican Republic," HFS Technical Report No.2, HFS Project, Bethesda, MD: 1990.
- La Forgia, G. and C. Griffin, "Health Financing and Management in Belize: An Assessment for Policymakers. Volume II: Health Sector Cost Recovery in Belize: Current Situation and Prospects for Change," HFS Project, Bethesda, MD: 1991.
- Levine, R., and G. La Forgia, "Health Financing and Management in Belize: An Assessment for Policymakers. A Compendium of Technical Notes. Volume V: Resource Allocation," HFS Project, Bethesda, MD: 1991.
- Makinen, M., and B. Barker, "Trip Report for Senegal," HFS Project, Bethesda, MD: 1990.
- Musgrove, Philip, "Measurement of Equity in Health," World Health Statistics Quarterly, 39, p.325, 1986.
- Quick, J.D. and F. Ndemo, "Pharmaceutical and Medical Supplies System Assessment, Kenya Ministry of Health. Trip Report and Technical Notes," HFS Project, Bethesda, MD: 1990.
- Setzer, J. and M. Weaver, "Assessment Report for the Central African Republic," HFS Project, Bethesda, MD: 1990.
- Setzer, J. "Trip Report for Central African Republic," HFS Project, Bethesda, MD, 1991.
- Setzer, J., "Haiti Trip Report," HFS Project, Bethesda, MD: 1991.
- Stevens, C., "Egypt Cost Recovery Programs in Health Project, Component One (Cost Recovery Hospitals): Project Design and Implementation," HFS Technical Note, HFS Project, Bethesda, MD: 1991.
- Wheeler, D., "Human Resource Development and Economic Growth in Developing Countries. A Simultaneous Model," World Bank Staff Working Papers No. 407, The World Bank, Washington, DC: 1980.

SOCIAL FINANCING OF THE DEMAND FOR HEALTH SERVICES

by

Gerard M. La Forgia

INTRODUCTION AND RATIONALE

This theme paper focuses on advice and technical assistance regarding social financing provided by HFS to USAIDs, host governments, and private institutions during year two of the project. It also examines major social financing issues that have emerged from these activities during the course of year two. The paper concludes with a synopsis of future directions in technical assistance and applied research in social financing for year three.

Risk sharing is the central element of social financing and, at the same time, underlies the broader equity and efficiency issues that dominate health finance policymaking and analysis. All people face the risk of financial loss due to foregone output and payments for care because of illness; women face additional risks associated with child birth. This paper focuses on the financial risks of payment for care. Social financing arrangements, commonly referred to as group insurance schemes, provide the means whereby the risk of large outlays for medical care is shared among individuals. These arrangements can take on a variety of forms, but all involve the collective pooling of resources, usually through the payment of premiums, to protect the individual in the event of a financial loss due to an illness event. In short, it is a two-step process: (1) participants make small, affordable payments (premiums) on a regular basis to a fund; and (2) this pooled fund is used to compensate individuals for the cost of medical care.

In a strict economic sense, insurance works best when it protects large groups of individuals against large financial loss. Such schemes usually cover uncertain events such as injury, accidents, or illness requiring hospitalization and are based on probabilities of these events occurring among a group of individuals. In other words, these events are unpredictable for the individual but predictable for the group. The National Hospital Insurance Fund in Kenya and Medicare in the Philippines are two examples of catastrophic insurance plans that limit coverage to hospital care.

Nevertheless, insurance schemes increasingly cover predictable, and to a lesser extent, voluntary events such as medical and dental checkups and periodic diagnostic tests. These schemes, usually referred to as prepayment plans, offer comprehensive coverage and dilute their insurance or risk-sharing element. Economists consider them less efficient risk-sharing mechanisms than catastrophic plans. However, coupling outpatient with inpatient care can result in efficient service utilization and delivery, especially in a managed care environment (explained below). If only inpatient care is covered, both patients and their providers have an incentive to overuse hospital services. Be that as it may, coverage of routine curative and preventive care has become a common feature of insurance schemes throughout the world, and in some cases, these types of services may be in greater demand by consumers than catastrophic care.

Prepayment plans combine the financing and service delivery aspects of health care. Prepayment plans, managed care plans, and Health Maintenance Organizations (HMOs) are labels often used interchangeably to describe a type of

health care financial and service delivery organization. These plans focus on managing costs through controlling (managing) the provision of services and procedures. Managed care plans have four major characteristics: (1) integration of financing, management, and service delivery aspects of health care services; (2) a defined enrollee population; (3) a defined and organized network of providers who either share the financial risk (of cost overruns due to higher than expected utilization) or have an incentive to deliver efficient services; and, (4) an information system that monitors utilization and costs. Despite these common elements, managed care plans can vary considerably regarding the techniques and mechanisms used to select providers, to pay providers, and to control enrollee utilization.

Risk-sharing mechanisms exist in both traditional and modern societies. Identification and development of these mechanisms in developing countries is an important starting point. Agricultural societies share risks through extended families, clans, and tribes. From a theoretical standpoint, risk sharing is limited in these societies, because risks are shared among a relatively small group. More formalized mechanisms of risk sharing are rooted in the benefit associations, guilds, and friendly societies of 14th century Europe. With modernization came the economic base and sources of funding for institutionalized forms of risk sharing through the monetization of economies, the advent of mass production enterprises and labor specialization, and the introduction of modern medical care. By the 18th century, occupationally-linked workers had created sickness funds through which resources were pooled to provide protection from the financial risk associated with a catastrophic illness. Because of modern institutional arrangements through which these funds were organized--government, labor unions, cooperatives, factories, etc.--risk sharing was spread among a large number of individuals.

Through assistance with the development and organization of risk-sharing schemes, HFS seeks to contribute to the extension of health services to low-income groups in developing countries. These arrangements can be designed on a purely private basis or in collaboration with government institutions.

HFS currently is providing technical assistance to USAID missions and host governments in several countries in preparation for launching demonstration risk-sharing schemes and catastrophic and prepayment plans, which link large groups to private health care providers. HFS analysts have identified a number of potential grouping mechanisms: firms, agricultural cooperatives, credit unions, microenterprise organizations, trade associations, chambers of commerce, artisan societies, unions, and popular organizations. Developing a practical and viable insurance scheme requires careful study of four sets of actors: consumers (participants), providers, grouping mechanisms (including employers), and the insurers. These factors are the subject of the first phase of HFS social financing applied research.

At the same time, HFS is exploring possible models of public-private collaboration in risk-sharing schemes. The health sector in many underdeveloped countries is entering a period of transition. Government health service systems face severe resource limits. In many countries, economic crises have restricted real growth in government budgetary allocations to the ministries of health. Most governments concentrate health resources in hospital facilities located in large urban areas; yet it appears that urbanites are dissatisfied with the low quality of care and lack of drugs and supplies. They increasingly avoid government direct delivery systems. Moreover, few resources are left to pay for public health services or to extend services of any kind to uncovered groups residing in rural

areas. Ministries of finance and international donors are growing impatient with the inefficiencies resulting from low quality of service, poor management, and chaotic medical care organization evident in many health ministry service systems. These institutions are interested in exploring alternative mechanisms that move governments away from the direct delivery of "free" health services, especially curative care, but maintain government participation in the financing and regulatory control of these services. Risk sharing can be a key element of alternative strategies requiring a redefinition of government's role. Options include: government promotion of private medical services and private group insurance through tax exemptions, credit, and other incentives; and, government direct subsidization of insurance schemes that link low-income groups to private health providers. HFS is collaborating with government ministries and USAID missions to foster policy and legislative reform that will pave the way for redefinition of government's role in health care financing and delivery.

ISSUES

Social financing was a significant component of HFS technical assistance provided to USAIDs in six countries during year two: **Belize, Dominican Republic, Ecuador, Haiti, the Philippines, and Zaire**. The following issues came to the fore during these activities:

1. Limited knowledge of current private insurance markets (including the principal actors: insurers, providers, beneficiaries, employers, and "grouping mechanisms") and their potential for growth.
2. Lack of knowledge of financial, administrative, and managerial systems to provide prepaid health services. Inadequate organizational arrangements among private providers that foster managed care, including utilization/cost control.
3. Lack of provider and consumer understanding of managed care.
4. Legislative and regulatory impediments to the development of private and public-private risk-sharing schemes.
5. Questions about the role of large, state-supported, social insurance systems in the financing and delivery of health care.

HFS APPROACH TO THE ISSUES

This section outlines analyses performed together with advice provided by HFS analysts to USAIDs, host governments, and private institutions regarding each of the above issues.

1. **Limited knowledge of current private insurance markets and their potential for growth.**

In **Belize, Ecuador, Haiti, and the Philippines**, USAIDs are interested in exploring risk-sharing schemes as a means to expanding the role of the private medical sector in the financing and delivery of health care. However, there is little knowledge about private insurance markets, supply of private services, demand for private services from employers and workers, or about the feasibility of forming risk pools, especially for lower-income populations through cooperatives, credit unions, trade associations, etc. Based on a comprehensive

assessment of the above characteristics, HFS has presented information that permits decision makers to single out constraints to and opportunities for the introduction or extension of social financing schemes. In some countries, the analysis will pave the way for the establishment of risk-sharing schemes on a demonstration basis.

The following are examples of findings and recommendations resulting from HFS technical assistance concerning this issue.

- In **Belize and Ecuador**, HFS examined products offered by indemnity insurance companies and the linkages between insurer and provider. It was concluded that this form of insurance is neither affordable nor appropriate for extension to lower-income groups. These plans are tailored to the upper-middle class and are designed to cover expensive, high-technology services in elite domestic hospitals or in facilities located in developed countries. At the same time, most companies do not employ utilization management and other cost control techniques. Some barely cover costs (e.g., Belize) and others report large annual losses (e.g., Ecuador). These plans, as currently designed, are not viable models for extension to lower-income groups. However, these companies could provide the financial support and claims analysis experience to assist in the establishment of managed care or prepaid plans linked to providers.
- In **Belize, the Dominican Republic, and Ecuador**, HFS has identified financially sound and organizationally capable "grouping mechanisms" that are eager to participate in insurance schemes. The Chamber of Commerce in Belize and credit union and trade associations in Ecuador are examples. Also, HFS has pointed out that a major constraint to risk sharing is the lack of provider organizations to which the above groups can be linked. The private sector consists mostly of isolated, fee-for-service practitioners. HFS recommends that successful risk-sharing plans will require the creation of organized delivery mechanisms, such as HMOs. In both Belize and Ecuador, small groups of providers are attempting to establish or expand HMO-like arrangements. HFS plans to work with these groups in year three.
- Based on an analysis of the supply and distribution of private providers and on an assessment of a Medicare-HMO tie-up project in the Philippines, HFS is assessing constraints to the development and extension of managed or prepaid health care. HFS is identifying potential models or approaches to overcome these constraints that will be incorporated into the design of USAID/Manila's Health Finance Development Project.

2. Lack of development of financial, managerial, and organizational (medical care) systems to provide low-cost, pre-paid health services.

In several countries, there is a great desire to initiate managed care or prepayment plans from both the demand and supply sides. Managers of public and private hospitals, groups of private physicians, traditional insurance companies, regional or health zone directors, cooperatives, trade associations, and other groups have expressed interest in forming or participating in prepayment plans.

Although there is general knowledge of the advantages and disadvantages of managed care, few of the interested parties have the technical skills to design and implement a managed care plan. Depending on the country, HFS is providing ongoing technical assistance on several fronts: linking uninsured, low-income groups with established HMOs; aiding nascent HMOs to extend population coverage; and assisting USAIDs to establish demonstration managed care plans.

- In the **Dominican Republic**, HFS is assisting USAID/Santo Domingo to design a social financing subcomponent for the forthcoming Family Health Project. This component will link low-income groups in the formal and informal sectors to HMOs, known as Igualas. Currently, nearly 20 HMOs operate in the Dominican Republic. Most were organized by physicians and several have over 25 years of experience. Employers and microenterprises have indicated a strong willingness to finance employee health services if lower-cost models can be identified. HFS has recommended three such models. The components of each model are a series of managed care and cost-control devices related to benefit design, provider payment systems, and enrollee utilization control mechanisms.
- In **Zaire**, HFS technicians met with Health Zone officers interested in establishing prepayment schemes. HFS recommended that two of the Zones where Peace Corps volunteers are stationed receive technical assistance. However, the current economic crisis makes the development of health insurance difficult for the short term. HFS concluded that the introduction of additional insurance schemes should be postponed until after the current hyper-inflation conditions subside. Inflation would erode the real value of premiums collected by a fledgling risk-sharing scheme.
- HFS recently has identified a small HMO and a relatively large indemnity insurance company in **Quito, Ecuador** that are interested in working together to extend prepayment plans to cooperatives, trade associations, and other organizations serving lower-income groups. The private insurance market covers less than five percent of the population and generally serves upper-income individuals. Both companies are convinced that private insurance is affordable to a large portion of the urban population if it is based on strong managed care principles. Both are seeking USAID technical assistance to set up a prepayment plan for cooperatives. HFS is exploring the feasibility of a pilot project that would create an HMO affiliate (in a secondary city) that would offer a prepayment plan to three cooperatives and a trade association with a potential membership of over 100,000 individuals. HFS would provide technical assistance to the HMO and insurance company regarding the financing, design, and management of the scheme.

3. Lack of provider and consumer education and understanding of managed care.

In some countries, employers, employees, and providers appear reluctant to take part in health insurance plans. Although the reasons are varied, the lack of confidence in insurance appears to have two principal sources: (1) the politics and performance of state-supported social insurance systems, and (2) limited and sometimes negative experience with private insurance companies.

- In **Belize, Ecuador, and the Dominican Republic**, the state-supported social security systems are largely discredited because of low-quality medical services and low levels of cash benefits. Many distrust the system, claiming that they receive little in return for their contributions. Because of the poor record of social security systems, insurance systems of any kind are suspect.
- Another problem relates to government use of social security systems as a form of "state-craft" to gain political support among occupational groups, particularly urban industrial workers. Among other benefits, the insured in **Ecuador and the Dominican Republic** have the "right" to free and comprehensive medical care. Yet worker and employer contributions do not cover the cost of these services. Additional funds usually are "borrowed" from pension programs.

Governments together with social security bureaucracies have created a somewhat overindulgent mentality among the insured populations: demand for free medical care of any kind and quantity. This has resulted in over-medication and over-utilization of services in social security health systems, particularly in Latin America. The high demand social security mentality appears to have a spill over effect on private insurance markets. In **Ecuador**, for example, private insurance plans (including an HMO) have difficulties selling their products to workers. Apparently, many workers have been conditioned through their experience with social security to believe that health insurance entitles them to all types of medical services without deductibles, copayments, or utilization restrictions. In effect, many potential enrollees are poorly informed about health insurance and consider it simply a private form of social security.

- In **Belize and Ecuador**, there is little penetration of private medical insurance. In their attempts to market their products, some traditional health insurance companies tend to generate unrealistic expectations among enrollees, suggesting that all types of conditions and utilization are covered, when in fact this is not the case. In **Belize**, market penetration has been slow because many still recall the bankruptcy of two foreign-owned life/casualty insurance companies during the 1970s.
- Providers in many LDCs have little knowledge of managed care principles and practice. Traditional indemnity insurance is generally the only form of health plan available. Moreover, some physicians consider HMOs and other managed care systems as a form of physician labor exploitation. Although physicians in these countries are highly individualistic and prefer self-reliance in the solo practice setting, many complain of the low volume of patients. Interestingly, in the **Dominican Republic**, where HMOs have proliferated, many physicians acknowledge that they receive lower fees from the HMOs than from their fee-for-service patients but at the same time they admit that the HMOs are their "economic salvation" because of the large volume of patients that these plans channel to them.

HFS is working with employees, employers, and providers in **Belize, Dominican Republic, and Ecuador** in planning for the introduction or extension of managed care programs. The above considerations are critical to product design,

promotion, selling, and distribution. Clearly, it is important not to create unrealistic expectations among enrollees and providers. For this reason, HFS is advising USAID missions that establishing managed care organizations requires more than financial, organizational, managerial, and product development. A marketing strategy in touch with the idiosyncracies of the consumers and providers within each country is needed. Such a strategy requires three key elements: education of consumers and providers on health insurance in general, the specifics of (and rationale for) benefits and restrictions; and careful targeting of the providers and enrollees the plan wishes to attract.

4. Legislative and regulatory impediments to the development of private and public-private risk-sharing schemes.

Government regulations can inhibit risk-sharing directly and indirectly. They take three forms: (1) restrictions on the development of private practice, (2) competition from government and social security systems, and (3) disincentives resulting from tax codes and credit controls. HFS is examining the regulatory environment in five countries: **Belize, the Philippines, Ecuador, Senegal, and Pakistan**. In the two latter countries, research is currently under way regarding specific laws, decrees, regulations, and collective agreements that could affect policy reform and public-private collaboration in risk-sharing schemes. The following is a brief summary of some of the specific findings (Belize) and issues addressed (Philippines and Ecuador).

Belize: The supply of private physicians in Belize is artificially restricted by regulations and practices that make it difficult for recent medical school graduates to practice privately. Nascent private facilities are unable to expand services in part because of the lack of physicians with private licenses. For example, general practitioners are not permitted to practice privately in Belize City, the largest market for private medicine in Belize. Given this situation, it would be difficult to initiate a managed care plan that utilizes this lower-cost professional in a "gatekeeper" role. Higher-priced specialists would be the only alternative. HFS has recommended that these regulations be changed to facilitate entry into private practice.

Private specialists are permitted to admit private patients to government hospitals. HFS estimates that at least 50 percent of inpatients in Belize City Hospital, the country's principal hospital, are private. This practice appears to contribute to a fragmented private sector in which most physicians are solo practitioners in storefront settings. These specialists have little incentive to organize group practices or to invest in plant and equipment necessary to establish a private hospital. HFS has recommended that private patients in public hospitals be charged for services. The practice of admitting private patients to public hospitals should be phased out in the long run, or other options should be developed to change incentives.

Some providers and insurers call for tax credits for employers and individuals who purchase health insurance. Under current law, employers and individuals receive tax credits for the purchase of life insurance. Such a proposal requires further study within the Belizean context. Tax credits are not the only mechanism which the government can use to stimulate the private medical sector.

Philippines: A preliminary assessment showed that credit generally is unavailable for private hospitals. Physicians affiliated with some of these facilities are interested in establishing (or expanding) prepayment plans with employers. The National Economic Development Authority has not implemented a program to channel Asian Development Bank credit to hospitals.

Private sector providers complain that the government competes unfairly for medicare-paying patients. Government specialty hospitals admit non-specialty cases. Also, private hospitals must pay import duties on donated materials and equipment while public hospitals can import the same items without such levies. Whether (and how) the government should stimulate the private medical sector and the insurance market is the subject of an ongoing HFS assessment.

Ecuador: USAID/Quito is interested in exploring policy options and specific initiatives regarding alternative health financing mechanisms, including private and public-private risk-sharing arrangements. HFS has recommended a legislative and regulatory analysis to identify the potential legal obstacles and opportunities. Three components of the study pertain directly or indirectly to insurance. The study seeks to assess the legal barriers to the following proposed reforms:

- Conversion of Health Ministry hospitals into non-profit institutions. This study includes an analysis of potential legal barriers to seeking additional sources of financing through insurance, user charges, etc.
- Government financial support for private health insurance initiatives through tax exemptions, subsidization of premiums paid by low-income groups, promotion of HMOs, etc.
- Free election of health insurance plans by employers and employees insured through the Ecuadorian Social Security Institute.

Senegal: HFS is preparing for a review of the legal and regulatory framework affecting health care financing. Legal impediments and opportunities regarding private insurance and social security will be analyzed.

Pakistan: In an effort to present viable options for establishing and expanding health insurance plans, HFS will examine the regulatory environment stipulating coverage and benefits for specified groups. These include: medical attendance rules governing government employees, Social Security laws governing private sector industrial workers, and special laws governing specific groups such as railroad workers.

5. Questions about the role of large, state-supported, social insurance systems in the finance and delivery of health care.

Social security health service systems are known for high costs and low efficiency. Social security medical care programs in two HFS countries, the Dominican Republic and Ecuador, sustain large annual deficits in their medical

care programs and must borrow heavily from other programs (e.g., pension funds) to meet payroll and other operational expenses. Moreover, medical care services receive few votes of confidence from members and their employers. Through mandatory payroll deductions, these groups represent a significant source of funding for these systems. Increasingly, members are pressuring their employers to purchase private health insurance. From a different perspective, groups that are excluded from these systems, e.g, informal sector workers, domestics, agricultural workers, and the self-employed, do not desire affiliation with these systems because of the perceived low quality of services.³³ These groups also seek family coverage through private arrangements. In both countries, social security does not cover medical care for dependents.

HFS technical assistance relates to social security health service systems in three countries: **Ecuador, Belize, and Senegal.**

- **USAID/Quito, Ecuador,** together with private-sector employer and trade associations, is seeking a major reform of the operations of the Ecuadorian Social Security Institute (IESS). These groups propose to retain their IESS contribution for medical care (approximately five percent of salaries) to purchase coverage from private health insurance plans chosen by each firm and its employees. The contribution will be used to pay the premium of the private plan. As mentioned in issue (4) above, HFS currently is examining the legal implications of this measure. HFS analysts will explore options with IESS managers, board members, and affiliated employers to launch a pilot project in a secondary city.
- **The Belize Social Security Board (SSB)** does not cover medical care except for work-related injuries. Because of the SSB's strong financial standing, Belize's Ministry of Health (MOH) has proposed that the SSB support MOH health services through direct transfers. Others have proposed that the SSB establish a health delivery system for the insured. HFS has recommended instead that the SSB work with the government to create a comprehensive health insurance system. Such a system would reorient the government's current dual role of financing and delivering services, theoretically for all Belizeans, to the single role of financing services for low-income individuals. HFS proposes that services be delivered through the private sector, but that controls be established through government regulations and through incentive systems. Although HFS recommends institutional separation between the health insurance system and the SSB, the latter can provide important logistical and administrative collaboration in terms of premium collection, accounting, claims analysis, and investment management.
- **An HFS study in Senegal** addresses a myriad of issues relevant to health financing associated with two health insurance funds. These funds, "Institutions de Prévoyance Sociale" (IPS), and the "Caisse de Sécurité Sociale" (CSS), provide direct services as well as reimburse private providers for treatment rendered to the members. HFS found that there are inequities in the manner in which members pay premiums, inconsistencies in employer participation in the

³³In Ecuador, Social Security covers about 12 percent of the population, while its counterpart in the Dominican Republic covers five percent.

funds, and inefficiencies in the provision of and reimbursement for services. HFS recommends that certain CSS practices, such as direct payments based on family size and significant maternity benefits, contradict and run contrary to the intent of the national family planning policy adopted by the Government of Senegal.

FUTURE DIRECTIONS

During year three, HFS will continue providing technical assistance in social financing. The upcoming year will be particularly exciting in terms of the opportunities to launch or extend risk-sharing interventions in at least four countries: **Belize**, **Ecuador**, the **Dominican Republic**, and **Haiti**. In **Belize**, HFS plans to assist in setting up a risk pool for firms affiliated with the Belize Chamber of Commerce. The plan will cover employees and dependents. On the provider side, HFS will work with two groups of physicians who seek to establish an HMO. In the **Dominican Republic**, HFS will assist USAID/Santo Domingo to design the Family Health Project, which includes a social financing component linking informal sector entrepreneurs and workers with indigent HMOs. In **Ecuador**, HFS will support USAID/Quito's efforts to design a private sector strategy. As currently envisioned, this strategy contains a significant social financing component: establishing risk pools through credit unions and cooperatives. With the prospective establishment of an HMO affiliated with the Bon Repos hospital in **Haiti**, HFS will assess the effect of health insurance (among other variables) on hospital revenues and costs as well as on utilization patterns.

Other planned technical assistance activities include an analysis of costs at categories of hospitals affiliated with **Kenya's** National Hospital Insurance Fund (NHIF) to rationalize premiums and payment rates. The cost analysis will lead to a cost accounting system that will allow the NHIF to assess rates and payments on a continuing basis. In **Pakistan**, HFS plans to analyze the legal and policy environment regarding the deregulation and expansion of private insurance markets. In addition, plans call for an analysis of existing insurance schemes, such as the Employee Social Security Institutions (ESSI), as well as the introduction of pilot projects to allow more freedom of choice for those covered by ESSI.

In the second phase of HFS activities in **Egypt** with the Cost Recovery for Health Project, technical assistance will concentrate on further developing methods for conversion of facilities to a cost recovery basis. One major component of this assistance is in the area of social financing, as success of the cost recovery program will depend to a great extent on development of social financing mechanisms. Activities will include studies and surveys that will contribute to social financing options regarding the following activities:

- Linking the Health Insurance Organization (HIO), private insurance companies, and local governments with Cost Recovery Project facilities.
- Linking private companies and other "grouping associations" not covered by private insurance companies or the HIO to the facilities.

Finally, HFS's applied research will analyze conceptual issues and synthesize empirical evidence available from industrialized and developing countries to plan field work in social financing. In addition to the planned social financing activities in **Belize**, **Ecuador**, the **Dominican Republic**, **Egypt**,

and Senegal, tentative sites for additional applied research include the Philippines, Korea, and Thailand.